Updated Class III Cultural Resources Inventory Report

Flickertail Solar Project
Richland County, North Dakota

Class III Cultural Resource Inventory for Archaeology and Architectural History

SHSND Reference: 24-9003

March 6, 2025

PREPARED FOR

Flickertail Solar Project, LLC
422 Admiral Blvd.
Kansas City, Missouri 64106

PRESENTED BY

Tetra Tech, Inc.
2001 Killebrew Drive, Suite 141
Bloomington, MN 55425

MANAGEMENT SUMMARY

This report presents the findings of a Class III Cultural Resource Inventory for Archaeology and Architectural History for the proposed Flickertail Solar Project (the Project) located 1.4 miles (2.3 kilometers) northwest of Galchutt in Richland County, North Dakota (State Historical Society of North Dakota [SHSND] Reference 24-9003). The investigation has been completed for 3,293 acres (1,333 hectares) of private, leased land (i.e., the Survey Area) where Flickertail Solar Project, LLC (Flickertail) proposes to develop a solar facility. Approximately 74 percent of the Survey Area (2,428 acres [983 hectares]) is cultivated cropland; the remaining areas consist predominantly of grasslands/herbaceous. The Project will be located in, or within portions of, Sections 3, 5, 8-12, 14-16, and 22 of Township 134 North, Range 49 West (Abercrombie Township). A report detailing architectural resources within 0.5 mile (0.8 kilometer) of the Project's proposed solar arrays will be submitted separate from this report.

The Project will require a Certificate of Site Compatibility from the North Dakota Public Service Commission (PSC) (Case PU-24-351); therefore, the Project is subject to review by the SHSND under North Dakota Century Code (NDCC) 49-22-09 – Factors to be considered in evaluating application and designations of sites, corridors, and routes.

The purpose of this investigation was to identify archaeological and architectural resources within the Survey Area. The investigation included the following items.

1) A Class I Inventory (Literature Search) of the Study Area (i.e., the Survey Area plus a 1-mile [1.6-kilometer] buffer) to identify the presence of previously documented cultural resources.
2) A Class III Inventory (Intensive Cultural Resources Inventory) pedestrian survey of the entire Survey Area to attempt to relocate previously recorded cultural resources and to assess the presence or absence of previously undocumented archaeological and architectural resources within the Survey Area. The Survey Area includes portions of the Project's leased lands where solar facilities and associated permanent or temporary impacts may be located.
3) Shovel probing of select sites to assess the presence or absence of subsurface archaeological resources.
4) National Register of Historic Places (NRHP) eligibility recommendations and guidance on site avoidance for identified cultural resources within the Survey Area.

The Class I Inventory identified one previously documented historical archaeological site lead (32RIX61 – [redacted] in the [redacted] of the Survey Area, [redacted]. Evidence of Site Lead 32RIX61 ([redacted]) was not observed in the Survey Area during the pedestrian survey; [redacted] If the site were present in this location, the construction of the [redacted] would have likely destroyed the site.

Seven additional previously documented cultural resources, including five architectural, one historic archaeological, and one archaeological, were recorded in the Study Area, outside of the Survey Area. These resources are currently unevaluated for listing in the NRHP. These resources are at least 0.5 mile (0.8 kilometer) from the Survey Area. **Based on this distance, it is Tetra Tech's opinion these resources will not be directly or indirectly impacted by the proposed Project.**

Pedestrian surveys were undertaken in late October/early November 2023. Approximately 74 percent (2,428 acres [983 hectares]) of the Survey Area is cultivated cropland, and non-cultivated areas make up approximately 26 percent (865 acres [350 hectares]) of the Survey Area. Cultivated cropland included row crops such as corn and soybeans. Ground surface visibility ranged from 60 to 100 percent in fields that had been tilled and ranged from 10 to 30 percent in fields that had not been tilled or were planted with cover crop.

The non-cultivated areas within the Survey Area consist predominantly of grasslands/herbaceous (567 acres [230 hectares]), trees (112 acres [45 hectares]), and wetlands and riparian (108 acres [44 hectares]). The remaining 78 acres (32 hectares) consists of public road and railroad rights-of-way (ROWs). Within non-cultivated areas, ground surface visibility ranged from 0 to 25 percent. Based on Tetra Tech's review of historical aerial photography, all portions of the Survey Area have been cultivated at some point since the early 1950s. The potential for intact cultural materials to be present in the typical agricultural plowzone (approximately 12 to 18 inches [30.5 to 45.7 centimeters] below ground surface [bgs]) is presumed to be low within the Survey Area. **Tetra Tech developed an unanticipated discoveries plan to facilitate documentation and coordination with the SHSND if cultural materials are inadvertently uncovered during construction.**

Tetra Tech documented five cultural resources within the Survey Area, including three Native American chipped stone isolated finds (32RIX409, 32RIX410, and 32RIX411), one Euro-American granary (32RI930), and one Euro-American artifact scatter (32RI931). Evidence of the previously recorded Site Lead 32RIX61 ([redacted]) was not observed in the Survey Area. Additional pedestrian surveys were undertaken in May 2024 to resurvey areas that had poor surface visibility during the pedestrian survey completed in late October/early November 2023. Shovel probing was also undertaken in May 2024 to assess the presence or absence of cultural material at the four Native American chipped stone isolated finds recorded in 2023. Tetra Tech's eligibility recommendations and avoidance recommendations are presented below.

- Site 32RI930: **Tetra Tech recommends the site as not eligible under Criteria A, B, C, and D; avoidance of the site is not recommended.**
    - Site 32RI930 consists of an isolated granary that first appears on 1961 Farm Service Agency (FSA) aerial photography, north of three other buildings formerly on the parcel. The current landowner stated that his father and uncle (who were previous owners of the parcel), constructed the building in the 1950s for use as grain storage and it has not been used since the 1960s. The other buildings formerly located on the site included another wood granary, and a shed/shop that was destroyed

by fire. The granary is now unused and contains trash (old bed frames, crates, and wood). It is in disrepair and generally poor condition.

The building is not associated with significant events that have contributed to the broad patterns of the history of North Dakota, Richland County, or Abercrombie Township, and is therefore not recommended eligible under NRHP Criterion A. It is not associated with the life of a person or persons important to our history and research has revealed no associations between the granary and important historical figures. Therefore, the building is recommended not eligible for listing in the NRHP under Criterion B. The building is a simple, modest, utilitarian building, constructed of materials and style commonly found throughout this region, and it does not embody distinctive characteristics of a type, period, or method of construction. Further, the building does not possess characteristics that represent the work of a master, nor does it possess high artistic values that rise to the level of significance to be eligible under NRHP Criterion C. As such it is recommended not eligible under Criterion C. It is not known to have yielded, or be likely to yield, information important in prehistory or history and is not recommended eligible under NRHP Criterion D.

- Site 32RI931: **Tetra Tech recommends the site remain unevaluated under Criterion D; the Project has avoided impacts to the site.**
    - Site 32RI931 consists of a surface artifact scatter associated with a former Euro-American farmstead initially observed on the 1897 W.M. House atlas. A structure in the location of the site was observed on 1952 Army Map Service (AMS) aerial photography; however, the structure was not observed on 1961 FSA aerial photography. Vegetation outlining the extent of the farmstead was observed from 1990 to 2020 on Google Earth Pro aerial photography. By October 2023, the trees were no longer present and the area appeared fallow. The artifacts observed on the surface of the site are likely the result of the removal of the structure in the late 1950s/early 1960s, and the grubbing of the location in the early 2020s. The age of the artifacts observed correlate with the historic document review. It is unknown how the former structure was removed from the site (i.e., burned and buried or hauled offsite). It is possible that intact features may be present on site. Due to the removal of the former structure, the integrity of Site 32RI931 has been severely reduced.

      The site is not associated with significant events that have contributed to the broad patterns of the history of North Dakota, Richland County, or Abercrombie Township, and is therefore not recommended eligible under NRHP Criterion A. It is not associated with the life of a person or persons important to our history and research has revealed no associations between the site and important historical figures. Therefore, the site is recommended not eligible for listing in the NRHP under Criterion B. The archaeological materials identified at Site 32RI931 appear to consist of materials that would be standard on a farmstead during the first half of the 1900s. Intact features may exist at the site and additional subsurface investigations would be warranted to evaluate the

site under Criterion D – the potential for the site to have yielded, or may be likely to yield, information important in prehistory or history. Therefore, the site is recommended as unevaluated for listing in the NRHP. The current Project layout avoids impacts to the site. Any future changes, if required, will also avoid impacts to the site.

- Site 32RIX61: **Tetra Tech recommends the site remain unevaluated for listing on the NRHP; the Project has avoided impacts to the site.**
  - Tetra Tech did not identify any historical records of the [redacted] in county or local historical documents, and no evidence of the [redacted] was observed during the field survey. Approximately 4.3 acres (1.7 hectares) of the 8.7-acre (3.5-hectare) site lead is located within the [redacted]. Approximately 2.4 acres (1.0 hectare) of the site lead located beyond the [redacted] is located within a [redacted] The [redacted], which is not present in 1952 AMS aerial photography or the 1961 FSA aerial photography, was likely constructed during the development of the [redacted] No evidence of historic features was observed in the remaining 2.0 acres (0.8 hectare) of the site. Tetra Tech recommends the site remain unevaluated for listing in the NRHP. The current Project layout avoids impacts to the site. Any future changes, if required, will also avoid impacts to the site.

- Sites 32RIX409, 32RIX410, and 32RIX411: **Tetra Tech recommends the sites as not eligible under Criterion D; avoidance of the sites is not recommended.**
  - Site 32RIX409 consists of a surface isolated find within a cultivated field. Evidence of cultivation was observed at the location of the isolated find as far back as 1952. Nine shovel probes were placed at the site; all failed to identify additional cultural materials in the subsurface. Due to the absence of identified archaeological materials and a low potential for significant intact subsurface deposits at this site, it would not provide significant archaeological research potential or information. As a result, the site would not be significant under Criterion D: Archaeological Potential and is recommended not eligible for listing in the NRHP.

  - Sites 32RIX410 and 32RIX411 consist of surface isolated finds within cultivated fields. Evidence of cultivation was observed at the locations of the isolated finds as far back as 1952. Planned shovel probing could not be performed due to standing water at the sites. However, the absence of shovel probing data at these sites does not change Tetra Tech's eligibility recommendations. Due to the absence of identified archaeological materials and a low potential for significant intact subsurface deposits at these sites, they would not provide significant archaeological research potential or information. As a result, the sites would not be significant under Criterion D: Archaeological Potential and are recommended not eligible for listing in the NRHP.

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Agency Involvement and Regulatory Requirements 1
1.2 Purpose of the Investigation 1
1.3 Organization of the Report 2
1.4 Background Research 2
1.5 Field Methods 3
1.5.1 Pedestrian Survey 3
1.5.2 Shovel Probing 3
1.5.3 Site Form Updates 3
1.5.4 Artifact Management 4
1.5.5 Assigning Temporal Affiliation 4
2.0 ENVIRONMENTAL BACKGROUND 4
2.1 Physiographic and geologic setting 4
2.2 Soils 4
2.3 Hydrology 5
3.0 CULTURAL BACKGROUND 5
3.1 Precontact Period 5
3.1.1 Paleoindian Tradition (11,500 – 7,500 B.P.) 6
3.1.2 Plains Archaic Tradition (7,500 – 2,400 B.P.) 6
3.1.3 Plains Woodland Tradition (2,400 – 800 B.P.) 6
3.1.4 Plains Village Tradition (A.D. 1200 – 1780) 7
3.1.5 Equestrian Nomadic Tradition (A.D. mid 1780s – 1880) 7
3.2 Historic Context 7
3.2.1 Fur Trade Period (1738 – 1860s) 8
3.2.2 Military Period (1840s – 1860s) 9
3.2.3 Settlement Period (1864 – 1890) 10
3.2.4 Colfax 13
3.2.5 Galchutt 13
4.0 RESULTS OF THE LITERATURE SEARCH 14
4.1 Previously Documented Cultural Resources 14
4.1.1 Previous Cultural Resource Investigations 14
4.1.2 Archaeological Resources 15
4.1.3 Architectural Resources 15
4.2 Historical Document Review 16
4.2.1 General Land Office Maps (1871) 16

4.2.2 1897 W.M. House Atlas 16
4.2.3 1904 30-minute USGS Topographic Quadrangle 16
4.2.4 1910 Alden Publishing Company Atlas 16
4.2.5 1952 Army Map Service Aerial Photograph 17
4.2.6 1961 FSA Aerial Photographs 17
4.2.7 7.5-minute Topographic Quadrangles 17
4.2.8 1978 United States Geological Survey Aerial Photograph 17
4.2.9 1990-2023 Aerial Imagery 17
4.3 Literature Review Synopsis 17
5.0 RESULTS OF THE ARCHAEOLOGICAL SURVEY 18
5.1 Results of Field Surveys 18
5.1.1 Site 32RI930 19
5.1.2 Site 32RI931 20
5.1.3 Site 32RIX61 23
5.1.4 Site 32RIX409 23
5.1.5 Site 32RIX410 24
5.1.6 Site 32RIX411 24
6.0 DISCUSSIONS AND RECOMMENDATIONS 25
7.0 REFERENCES 29

TABLES

Table 1. Historical Resources Reviewed During the Investigation. 2
Table 2. Previous Investigations Conducted within the Survey Area and Study Area. 14
Table 3. Previously Documented Cultural Resources within the Study Area. 15
Table 4. Newly Documented Cultural Resources within the Survey Area. 19

APPENDICES

APPENDIX A – FIGURES
Figure 1 – Project Location
Figure 2 – File Search Results
Figure 3 – Results of Survey Overview
Figure 4 – Results of Survey
APPENDIX B – HISTORICAL MAP LOG
APPENDIX C – PHOTOGRAPHS
APPENDIX D – SHOVEL PROBING RESULTS
APPENDIX E – UNANTICIPATED DISCOVERIES PLAN

1.0 INTRODUCTION

This report presents the findings of a Class III Cultural Resource Inventory for Archaeology and Architectural History for the proposed Flickertail Solar Project (the Project) located 1.4 miles (2.3 kilometers) northwest of Galchutt in Richland County, North Dakota (Appendix A, Figure 1) (State Historical Society of North Dakota [SHSND] Reference 24-9003). The investigation has been completed for 3,293 acres (1,333 hectares) of private, leased land (i.e., the Survey Area) where Flickertail Solar Project, LLC (Flickertail) proposes to develop a solar facility. Approximately 74 percent of the Survey Area (2,428 acres [983 hectares]) is cultivated cropland; the remaining areas consist predominantly of grasslands/herbaceous. The Project will be located in, or within portions of, Sections 3, 5, 8-12, 14-16, and 22 of Township 134 North, Range 49 West (Abercrombie Township). A report detailing architectural resources within 0.5 mile (0.8 kilometer) of the Project's proposed solar arrays will be submitted separate from this report.

1.1 AGENCY INVOLVEMENT AND REGULATORY REQUIREMENTS

The Project will require a Certificate of Site Compatibility from the North Dakota Public Service Commission (PSC); therefore, the Project is subject to review by the State Historical Society of North Dakota (SHSND) under North Dakota Century Code (NDCC) 49-22-09 – Factors to be considered in evaluating application and designations of sites, corridors, and routes (State of North Dakota 2024a). NDCC 49-22-09 states the commission shall be guided by, but is not limited to, the following considerations, where applicable, to aid the evaluation and designation of sites, corridors, and routes, including the effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.

The Project must also comply with North Dakota's "Protection of human remains, and burial goods" law (NDCC 23-06-27) and accompanying administrative rules (North Dakota Administrative Code [NDAC] 40-02-03). These codes also apply to the Project if human remains are inadvertently discovered during the course of construction (State of North Dakota 2024b).

1.2 PURPOSE OF THE INVESTIGATION

The purpose of this investigation was to identify archaeological and architectural resources within the Survey Area. The investigation included the following items.

1) A Class I Inventory (Literature Search) of the Study Area (i.e., the Survey Area plus a 1-mile [1.6-kilometer] buffer) to identify the presence of previously documented cultural resources.
2) A Class III Inventory (Intensive Cultural Resources Inventory) pedestrian survey of the entire Survey Area to attempt to relocate previously recorded cultural resources, and to assess the presence or absence of previously undocumented archaeological and architectural resources within the Survey Area. The Survey

Area includes portions of the Project's leased lands where potential solar facilities and associated permanent or temporary impacts may be located.

3) Shovel probing of select sites to assess the presence or absence of subsurface archaeological resources.
4) National Register of Historic Places (NRHP) eligibility recommendations and guidance on site avoidance for identified cultural resources within the Survey Area.

1.3 ORGANIZATION OF THE REPORT

This report details the research methods, environmental and cultural background, results of the literature search, archaeological field survey results, recommendations, and conclusions. Mr. Adam Holven served as Principal Investigator for Archaeology, and Ms. Julia Mates served as the Principal Investigation for Architectural History. Ms. Abbie Kavouras and Mr. Holven served as authors. The field crew consisted of Crew Chief Mr. Mike Straskowski, Ms. Abbie Kavouras, Ms. Elizabeth Hingsberger, Mr. Andrew Shamoo, Mr. Matt Davis, Ms. Jaqy Spencer, Ms. Lizzy Symons, and Ms. Emily Davenport. Mr. Straskowski, Mr. Holven, and Ms. Mates have been listed in Tetra Tech's Cultural Resource Investigation Permit for 2023, 2024, and 2025.

Supporting documentation for this investigation includes Appendix A – Figures; Appendix B – Historical Map Log; Appendix C – Photo Log; Appendix D – Shovel Probing Results; and Appendix E – Unanticipated Discoveries Plan.

1.4 BACKGROUND RESEARCH

The Study Area was investigated through a file review completed at the SHSND in December 2023. This file review included identifying archaeological sites, historical archaeological sites, architectural resources, and cultural resource investigations within the Study Area.

The background research also included a review of historic sources, including General Land Office (GLO) maps, historical atlases, county and regional histories, and aerial photographs. These documents were examined to identify historic structures, railroads, roads, and trails that might be present within the Survey Area that might be encountered during the field survey. Table 1 identifies the resources reviewed for Richland County.

Table 1. Historical Resources Reviewed During the Investigation.

Source	Year
U.S. Department of the Interior Bureau of Land Management Plat Maps	1871
W.M. House Atlas	1897
United States Geological Survey (USGS) 30-minute Topographic Quadrangle	1904
Alden Publishing Company Atlas	1910
H.E. Wilson Guide and Atlas	1922

Source	Year
Army Map Service (AMS) Aerial Photography	1952
Farm Service Agency (FSA) Aerial Photography	1961
United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle	1959, 1960
USGS Aerial Photography	1978
Google Earth Pro Aerial Photography	1990-2020
U.S. Department of Agriculture (USDA) National Aerial Imagery Program (NAIP)	2024

1.5 FIELD METHODS

The Class III Inventory was conducted in accordance with North Dakota SHPO Guidelines Manual for Cultural Resource Inventory Projects (SHSND 2020).

1.5.1 Pedestrian Survey

A systematic pedestrian surface survey at 15-meter (49.2-foot) interval transects was conducted to determine the presence of artifacts or features on the surface. An EOS Arrow 100 GNSS global positioning system (GPS) unit paired with an Apple iPad operating ESRI Field Maps was used for navigation. If artifacts or features were identified during the pedestrian survey, an intensive surface survey of the area was conducted at 5-meter (16.4-foot) interval transects to delineate the site's surficial boundaries. Surveyors flagged site boundaries and recorded locations with the GPS using ESRI Survey123. The locations of temporally or culturally diagnostic artifacts and features were also recorded with the GPS. Potentially temporally or culturally diagnostic artifacts identified during the pedestrian survey were collected for further analysis and interpretation; non-diagnostic artifacts were left within site boundaries. The pedestrian survey also documented land use, ground cover, and surface visibility within the Survey Area. Observations and photographic documentation of field conditions are on record at the Tetra Tech office in Bloomington, Minnesota.

1.5.2 Shovel Probing

Shovel probes were excavated by observed soil horizons and excavated no less than 10 centimeters (3.9 inches) into sterile subsoil. All excavated sediments were passed through 0.25-inch (0.64-centimeter) hardware mesh and examined for cultural materials. All cultural materials identified during shovel probing were collected for further examination. If archaeological materials were encountered in shovel probes and subsurface probing was required for site delineation, then radial shovel probes were excavated at 5-meter (16.4-foot) intervals along site margins until two sequential negative probes were excavated to determine the site extent.

1.5.3 Site Form Updates

Following the completion of fieldwork, site forms were completed or updated and submitted to the SHSND.

1.5.4 Artifact Management

Artifacts recovered during the archaeological survey were cleaned and analyzed and are temporarily housed in Tetra Tech's office in Bloomington, Minnesota. Artifacts were examined for diagnostic features and lithic raw materials were identified by color, texture, fossils, inclusions, luster, and translucence. Tetra Tech will return collected archaeological material to landowners upon completion of the investigation.

1.5.5 Assigning Temporal Affiliation

During the field survey, identified archaeological resources were recorded, described, and mapped, and cultural affiliation was assigned when possible. Clear temporal affiliation was assigned to site types such as lithic scatters (prehistoric) and abandoned farmsteads (historic). If sites contained features or artifacts of indeterminate temporal affiliation or contained both prehistoric and historic components, this information was also noted. The assigned cultural affiliations were used to confirm or update existing cultural affiliation determinations in the site forms for previously documented archaeological resources.

2.0 ENVIRONMENTAL BACKGROUND

A brief overview of past and present environmental conditions within the Study Area provides a foundation for understanding human subsistence and settlement patterns in the region over time. Understanding how environmental variables (availability of food, water, fuel, and tool materials) affected past decision-making leads to a greater awareness of a region's potential archaeological resources.

2.1 PHYSIOGRAPHIC AND GEOLOGIC SETTING

The Survey Area lies within the Red River Valley of the Central Lowlands physiographic region in southeastern North Dakota (Bluemle 2000). The Red River Valley is characterized by flat plains created from the sedimentation on the floor of glacial Lake Agassiz, which was formed when the route of the Red River to Hudson Bay was blocked by glacial ice. Surface geology within the Study Area consists of the Quaternary Oahe Formation, which consists of river sediment and windblown sand (North Dakota Geological Survey [NDGS] 2023).

Raw materials for stone tool production would have been limited to former beach lines and stream valleys in the vicinity of the Survey Area.

2.2 SOILS

A total of 23 soil map units encompasses the Survey Area (U.S. Department of Agriculture-Natural Resources Conservation Service [USDA-NCRS] 2024a). A review of the parent materials for the soil map units identified that most parent materials for soils in the Survey Area are glaciolacustrine, which were deposited by Glacial Lake Agassiz. The other predominant parent material is glaciofluvial deposits, which were deposited by the Late Pleistocene Sheyenne Delta. Buried soils or A horizons would not be expected in soils with these parent materials.

Additionally, soils in the vicinity of Pitcairn Creek, which flows through the Survey Area (see Section 2.3), were not reported to have buried A horizons or soils (USDA-NCRS 2024b). It is Tetra Tech's opinion there is a low potential for deeply buried agricultural resources in the Survey Area. Archaeological materials, it present, would likely be present in the agricultural plowzone.

2.3 HYDROLOGY

Pitcairn Creek is located within the central portion of the Survey Area and represents the closest source of natural water to the Survey Area. Portions of the creek have been channelized in the western part of the Survey Area. Based on a review of aerial photographs from 1978 and 1990, the portion of Pitcairn Creek in the Survey Area was channelized between 1978 and 1990 (USGS 1978, Google Earth Pro 2025). Seasonal wetlands are also present in the Survey Area.

The Wild Rice River is located within the eastern portion of the Study Area, approximately 0.3 mile (0.5 kilometer) east of the eastern-most portion of the Survey Area. On a regional scale, the Survey Area is located in the Western Wild Rice Watershed, an east-flowing tributary of the Red River (USGS 2024).

3.0 CULTURAL BACKGROUND

This section provides a summary of the cultural background within North Dakota and the region surrounding the Survey Area. Similar to Section 2.0 (Environmental Background), a general understanding of a region's cultural resources is necessary for the interpretation of newly documented sites.

The Survey Area lies within the Southern Red River Study Unit (SRRSU) (SHSND 2008, 2015). The Study Units (drainage basins) are used for prehistoric and proto-historic archaeological site studies and management in the state.

3.1 PRECONTACT PERIOD

Prehistoric cultures within North Dakota are divided into five major traditions: Paleoindian, Plains Archaic, Plains Woodland, Plains Village, and Equestrian Nomadic (SHSND 2015). These traditions are subdivided into stages based largely on technological innovations that can be observed in the archaeological record. These innovations include changes in the forms of projectile point styles or the decoration of pottery. Behavioral adaptations such as changing subsistence and mobility patterns also serve as points of reference in determining the transition from one tradition to another. The following descriptions were compiled from the North Dakota Comprehensive Plan for Historic Preservation: Archaeological Component (SHSND 2008), Historic Preservation in North Dakota, 2010-2015: A Statewide Comprehensive Plan (SHSND 2015), and The Handbook of North American Indians Volume 13, Part 1 (DeMallie 2001).

3.1.1 Paleoindian Tradition (11,500 – 7,500 B.P.)

The Paleoindian Tradition is characterized by hunting and gathering adaptations with a notable concentration on now-extinct big game animals. The beginning of the Paleoindian Tradition focused attention on Pleistocene fauna such as mammoths and camelops; later focus was on species of bison intermediate in size between late Pleistocene and modern forms. Other characteristics of the Paleoindian Tradition include (1) geographically extensive interaction networks between social groups (Hayden 1981), and (2) distinctive lanceolate projectile point styles by which the various Paleoindian cultural complexes are identified. Cultural complexes represented in North Dakota from oldest to youngest include Clovis, Goshen, Folsom, Hell Gap-Agate Basin, Cody, Parallel Oblique Flaked, Pryor Stemmed, and Caribou Lake (SHSND 2008).

3.1.2 Plains Archaic Tradition (7,500 – 2,400 B.P.)

The Plains Archaic Tradition continued hunting and gathering adaptations seen during the Paleoindian Tradition, but with a focus on bison procurement and use of different types of stone tools. The Plains Archaic Tradition appears to have been marked by cultural changes such as (1) further diversification in projectile point styles (possibly representing regionalization of populations), (2) decline in the quality of flint knapping craftsmanship, and (3) reduction in the degree and extent of interaction between human populations in different areas and subareas. Hayden (1981) suggested that these cultural changes attest to an increase in the reliability of access to subsistence resources to the extent that it was no longer necessary to maintain extensive alliance networks to fall back on in times of resource failure. It seems equally likely that the negative environmental effects of the Altithermal led to a decline in the human carrying capacity on the Great Plains and thus to fewer groups of people.

Spanning approximately 5,000 years, the Plains Archaic Tradition is subdivided into Early (7,500 to 4,500 B.P.), Middle (4,500 to 3,000 B.P.), and Late (3,000 to 2,400 B.P.) periods. Plains Archaic complexes recognized in North Dakota include Oxbow, McKean Lanceolate, Duncan, Hanna, Pelican Lake, and Yonkee (SHSND 2008).

3.1.3 Plains Woodland Tradition (2,400 – 800 B.P.)

Plains Woodland Tradition lifeways are thought to have shared many similarities with those of the Plains Archaic. However, the practice of mound burial mortuary ceremonialism, the production and use of ceramic vessels, and possibly intensified use of indigenous seedy plants and grasses for food appear to have been Plains Woodland Tradition developments (Gregg 1994; Gregg et al. 1996).

The Plains Woodland Tradition is subdivided into three periods: Early (2,400 to 2,100 B.P.), Middle (2,100 to 1,400 B.P.), and Late (1,400 to 800 B.P.). Plains Woodland complexes recognized in North Dakota include Sonota/Besant, Laurel, Avonlea, Blackduck, Mortlach, Old Women's, and Sandy Lake (SHSND 2008).

3.1.4 Plains Village Tradition (A.D. 1200 – 1780)

Unlike earlier cultural traditions, the Plains Village Tradition relied heavily on horticulture and, to a lesser extent, on hunting and gathering (Steinacher and Carlson 1998). Cultigens in use at this time included maize, beans, squash, sunflowers, gourds, and tobacco. Plains Villagers were prominent in North Dakota from as early as A.D. 1000 until 1780, after which the Villagers were decimated by exposure to European diseases. It is generally believed that the key element in Plains Village adaptive strategies was the production of a dependable, storable surplus food supply, primarily in the form of dried corn. Stored surpluses of food facilitated the formation of larger, more permanently situated residential earthlodge village communities (SHSND 2008).

3.1.5 Equestrian Nomadic Tradition (A.D. mid 1780s – 1880)

The Equestrian Nomadic Tradition includes Native American lifeways that depended on horses, which were acquired by groups in the region during the 1700s (Lehmer 1971). The introduction of horses into the Native American cultures produced significant changes in subsistence economies, demographics, social organization, and settlement patterns. Horses were a considerable improvement over dogs as beasts of burden (Fredlund 1973), and they greatly increased the capacity of groups who adopted them to acquire and transport food (Beardsley et al. 1956). The adoption of French and English trade goods by Native American groups during this period also resulted in considerable shifts in lifeways.

Equestrian Nomadic lifeways were taken up by a diversified lot of cultural groups, including the Algonkian Blackfeet, the Siouan Crow, and the Siouan Middle Dakota. During early historic times, tribes inhabiting the area surrounding the Sheyenne River included the Dakota (Yankton and Yanktonai), Cheyenne, Assiniboine, Plains Ojibwa, and Ottawa (Swenson and Bleier 2008). Around 1800, the Red River Valley was populated by groups of Chippewa in the north, while Crow, Blackfoot, and Cree peoples populated the western portion of the valley (Dennis 2016). The Mandan, Hidatsa, and Arikara peoples inhabited villages along major rivers throughout much of the Dakotas during the late-prehistoric periods. The Proto-historic period in North Dakota (A.D. 1650-1800) was a time of Euro-American cultural impact on Native cultures, which came first from the north in the form of French and English trade goods. Trace amounts of European materials may have been available as early as 1613, when they could have been scavenged from the ships and stores abandoned by Hudson Bay exploration expeditions of 1612 and 1619 (Russell 1982). Goods may have also been acquired later from trading posts along the Saskatchewan River in southern Manitoba and Saskatchewan in the York Factory area of Hudson Bay in the fall of 1682 (Russell 1982).

3.2 HISTORIC CONTEXT

This section provides a brief summary of the historical context for archaeological resources in present-day Richland County and the surrounding area. A general understanding of a region's cultural history is necessary for interpretations of newly documented resources.

3.2.1 Fur Trade Period (1738 – 1860s)

The first Europeans to enter present-day North Dakota were French missionaries and fur traders. Phillipe Francois Renault, the director general of mines for France's Louisiana Territory, is said to be the first European explorer to physically reach eastern North Dakota. In 1719 he traveled up the Minnesota River and down the Red River into Canada (Severson and Seig 2006). No records of his route exist; thus, it is often said that la Verendrye was the first to arrive to eastern North Dakota. He sought a trade route to the Mandan and Hidatsa tribe from Canada in 1738, traveling along the Missouri River and back. He established the first trading center that influenced northeastern North Dakota, marking the beginning of the trading post era (Severson and Seig 2006).

While all the territory within the present-day boundaries of North Dakota was considered part of the 1803 Louisiana Purchase, only the areas drained by the Missouri River were included. The northeastern half of the state is in the Hudson Bay drainage basin, and therefore was not part of the transaction; the northeastern edge of the Louisiana Purchase lies a short distance west of the western border of present-day Richland County (Callan 1938). This area did not come into the United States until 1818, when Great Britain ceded the Red River Valley to the United States in the Treaty of 1818. News of the Lewis and Clark expedition into the territory of the Louisiana Purchase spurred more exploration by tourists and the military (Severson and Seig 2006). Growing interest in the region led to the creation of the American Fur Company in 1808, which merged with the Columbia Fur Company in 1821. Posts erected by these, and other companies, emerged and disappeared throughout the rest of the 1800s.

As fur trading increased in importance, the United States government hired explorers to map this previously uncharted part of the country. In 1823, Major Stephen Long passed through Richland County on his way to locate the boundary line (the 49 parallel) of the territory established in the 1818 treaty with Great Britain (Callan 1938). As Euro-Americans expanded further west in the 1820s, the Sheyenne River, which is located in the northwestern corner of present-day Richland County, became an important avenue of trade. Numerous trading posts were established along the Sheyenne River in the first half of the 1800s (Vehik and Vehik 1977; Whitehurst 1989). In 1826, the Columbia Fur Company established a post at the confluence of the Sheyenne and Red Rivers approximately 30 miles north of Richland County. By the 1830s, numerous trails between trading posts, villages, and forts crossed the Sheyenne River Valley, including an oxcart trail crossing near Kindred (Vehik and Vehik 1977; Whitehurst 1989; Gilman 1970), which lies immediately north of Richland County. Commercial trains of ox carts traversed the Red River Valley carrying furs and other goods to St. Paul, Minnesota (Ritterbush 1991).

In the Red River Valley, river crossings played an important role in the fur trade industry as well, as many Red River cart trails followed routes on either side of the Red River Valley in order to avoid muddy stream crossings near the river. Goods were often ferried over the river on makeshift rafts, or temporary bridges were built to aid in crossing. Norman W. Kittson, who formed the N.W. Kittson and Company trading company along the Minnesota River in 1842, passed through northern Richland County by means of a bridge site in the 1850s (Ritterbush 1991).

By the 1840s, several factors led to the decline of the fur trade industry in the region (Capace 2001). Smallpox epidemics decimated both Euro-American and Native American populations (Vehik and Vehik 1977; Robinson 1966; Whitehurst 1989), and overhunting resulted in the near extirpation of beaver and other mammals in the American West. Additionally, European fashion and hat-making trends shifted in favor of exotic furs. The industry was revived for a short time following the American Fur Company's emphasis on buffalo product trade in the 1840s. However, the United States-Dakota War of 1862 and resulting reservation policies ushered in the end of the fur-trading era.

With the collapse of the fur market in the region, the incentive to exploit bison and other mammals increased. Bison were first hunted for their meat, and later for their pelts; at that point, bison hunts became larger and more organized (Severson and Seig 2006). The frontrunners in bison hunting were the Metís, a group of people formed as a result of interracial marriage between the Cree Indians and French settlers. Their prowess in bison hunting was a cause for concern. In 1845, Captain Edwin V. Sumner lead a military expedition to diffuse a war between the hungry Yanktonai Sioux Tribe and the Canadian Metís. This intervention had no effect on the Metís' hunting patterns, and they continued to decimate the bison population until they were gone (Severson and Seig 2006).

As new states formed and territories dissipated, the eastern section of North Dakota became part of Wisconsin Territory (1836), Iowa Territory (1838), and Minnesota Territory (1849). After Minnesota became a State in 1858, the land between the Red and Missouri Rivers was left unorganized until it was made a part of the new Dakota Territory in 1861. The Richland County area was not placed in a county in this new territory until 1862, when it became part of Sheyenne County, which included most of present-day Richland County (Callan 1938).

3.2.2 Military Period (1840s – 1860s)

Hostilities between Euro-Americans, Native Americans, and fur traders began to escalate as early as the 1820s. As the situation became untenable to the federal government, military troops were sent to quell hostilities. In 1849, Major Samuel Wood and Captain John Pope crossed the Red River at Graham's Point and entered Richland County to investigate complaints of relentless buffalo slaughter, trespassing by British subjects, and the selling of liquors to the Native Americans (Callan 1938). The next military visit to the county would be Isaac I. Stevens' expedition to the Pacific Coast in 1853, when he traveled on the west side of the Red River until he turned west at Graham's Point, crossed the Wild Rice and Sheyenne Rivers, and trekked onwards to Seattle. His mission was to make a preliminary survey for railroads, and a feasible pass over the Rocky Mountains; the Red River Valley and Western Railway extant in Richland County and the surrounding areas are a result of his surveys.

The next military expedition through Richland County was in 1856 when Colonel C.F. Smith set out to determine the location of a line of forts; a necessary action to protect the frontier as settlers continued to pour into the Dakota Territory in search of untouched land (Callan 1938). His report on the Red River valley area established the location of the first military fort (Fort Abercrombie) in North Dakota at Graham's Point in 1858. The fort would be used to train volunteers and officers for the Civil War and to protect the heavily utilized Red River Trail, where hundreds of

oxcarts were transporting goods to and from Minnesota points. With the establishment of Fort Abercrombie came the attraction of steam boating on the Red River, which further encouraged trade between the St. Paul Chamber of Commerce, trappers, and traders. By 1859, the Red River settlers were spending $100,000 a year in St. Paul, largely on fur products (Robinson 1966). Several well-known trails radiated from Fort Abercrombie through parts of Richland County, such as the Sibley Trail (Callan 1938).

Fort Abercrombie was also set up to control Native Americans and to protect routes to Montana, but it only increased the hostility of the Sioux, especially with the Yanktonais and Tetons. Furthermore, as a result of a crop failure in the fall of 1861 followed by a hard winter, the government failed to deliver annuity payments and supplies to the Sioux during the spring and summer of 1862 (Callan 1938). The Sioux, desperate for food, turned to agency traders who sold them food on credit. Tempers flared in a meeting with Dakota leaders and the Bureau of Indian Affairs, subsequently igniting the United States-Dakota War of 1862, a continuation of the Minnesota Massacre, which broke out in southern Minnesota under the command of Little Crow. The first attack is known as the Battle of Lower Sioux Agency, where on August 18, 1862, days after the meeting, the Dakota attacked the traders' store, barns, government personnels' living quarters, and other buildings of the Lower Sioux Agency settlement in Brown and Renville Counties, Minnesota (Callan 1938; DeCarlo 2014). The Sioux also attacked stage drivers and burned merchandise, way stations, and tiny posts along the Red River, halting the steamboat industry and rendering wagon trails nearly impassable (Robinson 1966).

The United States-Dakota War of 1862 involved numerous attacks on Fort Abercrombie. Attacks on Euro-American settlers at Breckenridge, a settlement immediately east of present-day Wahpeton, prompted around 77 settlers from the Richland County area to take shelter at Fort Abercrombie for protection. Minnesota Governor Alexander Ramsey placed Henry Sibley in charge of U.S. forces at the fort (DeCarlo 2014). An attempt to gather additional, much-needed troops from Fort Snelling failed, as there was also a great need for men in Minnesota. On August 30, the Sioux attacked the fort and drove off the majority of the settlers' and Chippewa nations' livestock kept at the fort (Callan 1938). From September 6 to September 23, the fort was under siege. No more major attacks were made, but the Sioux continued to fire at the fort from the trees on the riverbank. Reinforcement troops led by Captain Emil Burger from Minnesota arrived on September 23; several small attacks on the Sioux followed, during which, one Sioux camp was burned. The Sioux forces were eventually driven westward. On September 30, approximately 220 men, women, and children left the fort for St. Cloud and St. Paul under military escort.

3.2.3 Settlement Period (1864 – 1890)

Settlement in the Red River Valley dramatically decreased for approximately 2 years following the Sioux attacks on Fort Abercrombie; an increased number of troops stationed at the fort and a district cavalry patrol slowly encouraged settlement. Morgan T. Rich visited the county 2 years after the siege of Fort Abercrombie. Astonished by the setting and soil fertility of the area, he returned to live in a dugout in the riverbank in 1869, beginning the settlement known as Richville, known as present-day Wahpeton (Callan 1938).

In the 1860s, the territory of present-day Richland County was also underdeveloped in settlement due to insect infestations and periodic intertribal conflict. In 1870, a peace treaty was signed at Fort Abercrombie between the Sioux and the Chippewa, creating a greater sense of security. Steamboat traffic on the Red River also grew, supplying the northern part of the Red River Valley and creating many jobs for the early settlers. By 1875, many boats such as the *International, Dakota, Alpha,* and *Cheyenne* were carrying passengers up and down the Red River, and thousands of tons of freight, such as rails for the railroads, grain, and livestock (Robinson 1966). The steamboat industry continued through the late 1800s, expanding as railroads from St. Paul reached the Red River. New boats were built to ship wheat to railroad shipping points as late as 1895 (Robinson 1966). The last boat on the river sank in 1912.

The St. Paul and Pacific Railroad Company's Northern Pacific main line was the first railroad to reach present-day North Dakota. Completed in 1872, it was the most important of the Minnesota railroads. Stretching from St. Paul to the Red River at Breckenridge, Minnesota/Wahpeton, North Dakota, it facilitated settlement on the eastern border of present-day Richland County, and provided easy access to western Minnesota, meeting the increasing demands in the Dakota Territory for food, building materials, and transportation more adequately than the cart and wagon (Callan 1938). In 1873 after the completion of the Northern Pacific, the Northern Pacific Railroad Company collapsed, spurring on a nationwide financial panic that once again slowed immigration into the county (SHSND 2014). The Panic of 1873 left the state with inadequate railroad connections; the newly constructed Northern Pacific did not directly connect to St. Paul and could not run on specific lines during the winter. In 1879, the St. Paul Minneapolis and Manitoba Railway Company (Manitoba) took control of the St. Paul and Pacific Railway Company, immediately forging connections between the Red River Valley and Canadian markets by building two north-south railroads. The second north-south line passed through Richland County and through the Survey Area; it was a direct extension of what was previously the Northern Pacific main line. The Manitoba extended this railroad 48 miles (77.2 kilometers) to Durbin via Wahpeton through Richland County. This led to the founding of Dwight (1880), Walcott (1880), Colfax (1881), and Galchutt (1882).

Those who came to North Dakota to acquire land could buy it from the bankrupt Northern Pacific Railway Company, who agreed to exchange previously purchased bonds for land at face value; thus, investors could purchase large tracts of land for only 16 cents per acre (Drache 1967). Others could acquire land through the federal government. The Pre-emption Law allowed a settler who did not own 320 acres (129.5 hectares) in any state or territory to buy 160 acres (64.7 hectares) for $1.25 an acre, so as long as they have lived on the land for 6 months and made certain improvements. Other acts such as the Homestead Act, and the Timber Culture Act, also allowed for accessible land acquirement and the establishment of communities throughout the state, drawing in a flood of pioneers, though less than 500 people had moved to present-day Richland County by 1873. In the same year, the county was named Richland County after Mr. Rich, and Wahpeton was named the county seat.

With the spreading news of a suitable climate and fertile soils combined with the establishment of land and immigration departments by the Northern Pacific Railroad Company, a steady stream of immigrants was pouring

into the county by 1874. The majority of the immigrants were German and Norwegian, taking up homesteads along the Red, Wild Rice, and Sheyenne Rivers (Callan 1938). The sense of security within the county by 1877 was strong enough to allow the withdrawal of troops from Fort Abercrombie. As a result, the military reserve was opened for settlement and the buildings were auctioned off in 1879 (Callan 1938). Richland County saw a 300 percent increase in population – from 3,567 in 1880 to 10,751 in 1890 (Callan 1938). By 1900, the population of Richland County had risen to over 17,000 (United States Census Bureau 2024). The county's population peaked to around 21,000 in 1930 (Malloy et al. 2022), and has gradually declined ever since, with a population of approximately 16,500 people as of 2020 (United States Census Bureau 2020).

By the end of 1881, the Northern Pacific Railroad Company had sold most of its land west of the Red River, and soon numerous 'bonanza farms' were encompassing thousands to tens of thousands of acres cultivating wheat (Malloy 2022; Callan 1938). Perhaps the best know bonanza farm in Richland County was the Dwight Farm, which was founded in 1880 and reached a holding of 27,000 acres (10,926 hectares). While the scale of operation on bonanza farms was astounding, the harvest cycle was adapted to a wheat country where extensive agriculture was upheld by scant rainfall, resulting in relatively low yields per acre. The number of workers required on a given bonanza farm depended on the season; many workers were needed for seeding, then fewer for haying and plowing. Many more workers were needed for the harvest, and even more for the threshing, then fewer for fall plowing, and only a handful to manage the stock during the winter (Robinson 1966). While some workers came from Minnesota and Wisconsin, many were Norwegian and German settlers working for cash to carry them through until their own land produced a crop.

With the rise of bonanza farming and the raising of grain came the demand for a means of processing it within the county. Two grist mills were built in 1881; one in Colfax, and one in Wahpeton. The arrival of the mills allowed for wheat to be processed into flour in Richland County instead of sending it to Minnesota. An 1891 issue of The Wahpeton Times boasted that the 100-barrel flour mill, costing the founders $25,000 to erect, was second to none. The mill at Wahpeton was acquired by Braun Brothers & Eckes and served a wide territory in Richland County and Minnesota through the 1930s (Callan 1938).

In 1896-1897, coal began to be shipped from Bismarck, taking the edge off the harsh winter conditions (SHSND 2014). In the early 1900s, in additional to wheat, the most important crops in the county were oats, barley, flax, rye, and hay (Gilbreath 1911). Potatoes also became an increasingly important crop during this time in the Red River Valley (Kenney 1995). By the early 1910s, degradation of land and a national wheat surplus decreased the profitability of bonanza farming, and many large farms were abandoned (Lee 2008). While important in the history of North Dakota, the bonanzas never dominated the agricultural scene; the average North Dakota farm in 1890 was only 72 acres (29.1 hectares) (Robinson 1966).

During the Great Depression in the 1930s, the number of farms increased in Richland County, but acres of wheat planted plummeted. Between 1930 and 1960, the number of farms in Richland County decreased; however, the

average farm size increased by about 100 acres (40.5 hectares) (Malloy 2022). During this period, technological advances such as radios, telephones, and televisions, as well as appliances that minimized workloads, made farm life more tolerable (Malloy 2022).

3.2.4 Colfax

Colfax is located approximately 1.4 miles (2.3 kilometers) north of the Survey Area and is located along the Red River Valley and Western Railroad (formerly Great Northern Railroad). In 1880, the Manitoba extended its second main line (now known as the Casselton Branch of the Great Northern Railway) from Wahpeton through the territory of present-day Richland County, bringing settlers from the southeast into the region. This led to the founding of Colfax in 1881, when Horace B. Crandall filed the plat of the original townsite (Callan 1938; Mitskog 1970). Due to its close proximity to Fort Abercrombie, the land in the vicinity of Colfax was settled rapidly and nearly filled by 1883 (Mitskog 1970). The first structures erected in the town were a hotel, store, and grist mill in 1881; the grist mill allowed for the processing of flour within the county and attracted more settlers (Mitskog 1970).

By 1900, Colfax had a population of 653 people (United States Census Bureau 2024). By 1906, the town boasted a grain elevator (1891), a hardware store (1897), a blacksmith shop (1904), and its first bank (1906). The hotel was a booming business; the 16-bedroom, air-conditioned building attracted all sorts of travelers passing through town by passenger train. Colfax became an incorporated village in 1954 (Mitskog 1970). The population of Colfax declined through the 1900s with only 70 residents in 1970 (U.S. Census Bureau 2020), but has steadily risen since, with a reported count of 248 residents in 2021.

3.2.5 Galchutt

Galchutt is an unincorporated community located approximately 1.4 miles (2.3 kilometers) southeast of the Survey Area along the Red River Valley and Western Railroad (formerly Great Northern Railroad). Hans Galchutt homesteaded the area in 1878. The expansion of the Manitoba's second main line into Richland County led to the official foundation of Galchutt. After the expansion of the railway, Mr. Galchutt built the first home, store, and grain warehouse in 1882 (Committee of the Centennial History of Galchutt [CCHG] 1982).

Very little development occurred prior to the early 1900s. During this time, an additional store and home was erected, along with a schoolhouse and a hotel. The Galchutt depot was established in 1891 along the railroad. The first post office was established in the same year, with Mr. Galchutt as the postmaster. A millinery shop and meat market also emerged in the 1890s, followed by a feed mill in 1892, a blacksmith shop circa 1900, and a bank in 1904 (CCHG 1982). Frequent flooding was a persistent issue in Galchutt, leading to the grading and graveling of Highway 81 in 1935. During World War I, many troop trains via the Great Northern Railroad passed through Galchutt, and telegraph operators in town worked 24-hour shifts to aid in the war effort (CCHG 1982).

4.0 RESULTS OF THE LITERATURE SEARCH

The purpose of the literature search is to provide a general understanding of the cultural resources previously identified within the Study Area and to provide a general overview of land use change within the Study Area.

4.1 PREVIOUSLY DOCUMENTED CULTURAL RESOURCES

4.1.1 Previous Cultural Resource Investigations

Three previous archaeological investigations intersect portions of the Survey Area (Appendix A, Figure 2; Table 2). One of the investigations is for improvements to U.S. Interstate 29, and the other two are associated with a proposed natural gas pipeline.

An additional five previous cultural resource investigations have occurred outside the Survey Area, but within the Study Area (Appendix A, Figure 2; Table 2). These surveys were conducted for bridges, fiber optic lines, and North Dakota Department of Transportation projects.

Table 2. Previous Investigations Conducted within the Survey Area and Study Area.

Report	Manuscript No.	Location
Historic Bridges in North Dakota (Johnson et al. 1992)	005920	Study Area
Safety Project Cultural Resource Review (North Dakota Department of Transportation 1992-1994)	006449	Study Area
Interstate Engineering's Pitcairn Creek Bridge Replacement: A Class III Cultural Resource Inventory in Richland County, North Dakota (Kulevsky 1996)	006775	Study Area
A Class III Cultural Resources Inventory for Vantage Point - Red River Rural Telephone Association – Buried Cable, Richland County, North Dakota (Harken 2006)	009676	Study Area
Bridge #123-14.0: A Class III Cultural Resource Inventory in Richland County, North Dakota (Bleier 2006)	009872	Study Area
I-29 Reconstruction Project; A Class III Cultural Resource Inventory in Richland County, North Dakota (Gordon 2016)	017072	Survey Area and Study Area
Class III Archaeological Inventory Survey Report: WBI Energy Transmission, Inc. Wahpeton Expansion Project, Cass and Richland Counties, North Dakota (Dodson et al. 2022)	019949	Survey Area and Study Area
Class III Archaeological Inventory Survey Report: WBI Energy Transmission, Inc. Wahpeton Expansion Project, Cass and Richland Counties, North Dakota (Malloy et al. 2022)	019950	Survey Area and Study Area

4.1.2 Archaeological Resources

One previously documented archaeological resource has been documented within the Survey Area (Appendix A, Figure 2; Table 3). Site Lead 32RIX61 is the [redacted] and the previously recorded site lead area occupies 8.7-acre (3.5-hectare) of the Survey Area. The site lead is unevaluated for listing in the NRHP. Approximately 4.3 acres (1.7 hectares) of the 8.7-acre (3.5-hectare) site lead is located within the [redacted], which consists of a [redacted] (Appendix C, Photographs 14 and 15). Approximately 2.4 acre (1.0 hectare) of the site lead located beyond the [redacted] is located within a [redacted] (Appendix C, Photograph 14). The [redacted], which is not present in the 1952 AMS aerial photograph or 1961 FSA aerial photographs, was likely constructed during the development of the [redacted]

Two additional archaeological site leads were identified within the Study Area, beyond the Survey Area (Appendix A; Figure 2; Table 3). Both resources are unevaluated for listing on the NRHP. Site Lead 32RIX60 is the reported location of the [redacted] and is located [redacted] from the Survey Area. Site Lead 32RIX389 is a reported location of a Native American burial mound, located approximately [redacted] portion of the Survey Area. The site form from August 1965 indicates that two mounds, roughly 20 feet (6.1 meters) in diameter and 3 feet (0.9 meter) high were located in virgin prairie. A review of current aerial photography revealed the site lead is located in a cultivated field. A review of LiDAR Maps hosted by the NDGS failed to identify any mound-like features in the imagery in the reported location (NDGS 2016).

4.1.3 Architectural Resources

The file search did not identify any previously inventoried architectural resources within the Survey Area; however, five previously inventoried architectural resources were identified within the Study Area (Appendix A, Figure 2; Table 3). These resources are currently unevaluated for listing in the NRHP. The nearest architectural resource to the Survey Area is [redacted] (Site 32RI00685), which is located [redacted] from the Survey Area (Appendix A, Figure 2).

Table 3. Previously Documented Cultural Resources within the Study Area.

Site No.	Type	Location	Description	Recommended NRHP Status
32RI685	Architectural	Study Area	[redacted]	Unevaluated
32RI756	Architectural	Study Area	[redacted]	Unevaluated
32RI757	Architectural	Study Area	[redacted]	Unevaluated
32RI851	Architectural	Study Area	[redacted]	Unevaluated
32RI920	Architectural	Study Area	[redacted]	Unevaluated
32RIX60	Historic	Study Area	[redacted]	Unevaluated

	Archaeological		Station	
32RIX61	Historic Archaeological	Survey Area	[redacted]	Unevaluated
32RIX389	Archaeological	Study Area	[redacted]	Unevaluated

4.2 HISTORICAL DOCUMENT REVIEW

Tetra Tech reviewed historical atlases, topographic quadrangles, and aerial photographs (Table 1) to identify the presence of structures, settlements, trails, roads, railroads, and other manufactured features that may have been historically present within the Survey Area. Historic features, if documented, were georeferenced and loaded onto an Apple iPad operating ESRI Field Maps for reference during field survey.

4.2.1 General Land Office Maps (1871)

The 1871 GLO maps did not reveal any historic features in the Study Area (Appendix B, Map 1). The north-south trending Wild Rice River and its tributaries were illustrated east of the Survey Area (General Land Office Survey Maps of North Dakota 1871).

4.2.2 1897 W.M. House Atlas

A review of the 1897 W.M. House atlas revealed nine structures (S01 through S09), the Great Northern Railroad, and section line roads within the Survey Area (Appendix B, Map 2). Additional residences, schools, and a church were illustrated within the Study Area, as well as the Wild Rice River in the eastern portion of the Study Area.

4.2.3 1904 30-minute USGS Topographic Quadrangle

A review of the 1904 30-minute USGS Wahpeton, North Dakota Topographic Quadrangle revealed seven structures within the Survey Area (Appendix B, Map 3). Structures S10 and S12 were observed on the 1904 topographic quadrangle; however, structures S01, S02, S03, and S08 previously depicted on the 1897 W.M. House atlas were not illustrated on the 1904 topographic quadrangle.

4.2.4 1910 Alden Publishing Company Atlas

A review of the 1910 Alden Publishing Company atlas revealed that seven structures were present within the Survey Area (Appendix B, Map 4). Structures S15 and S16 were observed on the 1910 atlas; however, structures S04, S05, and S10 previously depicted on the 1904 30-minute USGS Wahpeton, North Dakota Topographic Quadrangle were not illustrated on 1910 atlas. An unnamed creek in alignment with Pitcairn Creek was illustrated intersecting the Survey Area. [redacted] was also illustrated in the approximate location of Site Lead 32RIX0060 [redacted].

4.2.5 1952 Army Map Service Aerial Photograph

A review of the 1952 AMS aerial photograph revealed that much of the Survey Area was agricultural cropland (Appendix B, Map 5). Farmsteads were observed at S06, S09, S12, and S15 within the Survey Area. A farmstead was also observed at S07, but the farmstead was observed to be outside of the Survey Area.

4.2.6 1961 FSA Aerial Photographs

A review of the 1961 FSA aerial photographs revealed that much of the Survey Area was agricultural cropland (Appendix B, Map 6). Structures were observed at S09, S12, S15, and S19 within the Survey Area. The aerial photographs revealed that the structure in the location of S06 was no longer present, only a vegetated area remained at S06.

4.2.7 7.5-minute Topographic Quadrangles

A review of the 1959 7.5-minute USGS Mooreton NW, North Dakota, and the 1960 7.5-minute USGS Galchutt, North Dakota Topographic Quadrangles identified one structure (S19) in the Survey Area (Appendix B, Map 7). No other structures were illustrated in the Survey Area. A feature labeled “Flowing Well” was illustrated in the approximate location of S09. A double lane road was observed in the approximate location of U.S. Interstate 29, running north-south through the Survey Area. Structures at S07 were observed to be located outside the Survey Area.

4.2.8 1978 United States Geological Survey Aerial Photograph

A review of the 1978 USGS aerial photograph revealed S19 was still present in the Survey Area (Appendix B, Map 8). No other previously identified structures were observed in the Survey Area.

4.2.9 1990-2023 Aerial Imagery

A review of the 1990 through 2020 Google Earth Pro aerial imagery revealed that portions of the Survey Area that were historically agricultural cropland were gradually converted to grasslands/herbaceous over the course of the 30 years (Appendix B, Map 9). The portion of Pitcairn Creek located in the western part of the Survey Area appears to have been channelized sometime after 1978. A review of the 2023 aerial photography revealed that the trees surrounding structure location S06 were no longer present, and the area appeared fallow (Appendix B, Map 10).

4.3 LITERATURE REVIEW SYNOPSIS

Based on the results of the literature review, one previously documented historical archaeological site lead (32RIX61 - [redacted]) is located within the Survey Area and is unevaluated for listing in the NRHP. The site lead is located near the [redacted]. If the site lead were present in this location, the construction of the [redacted] would have likely destroyed the site lead.

A total of 13 structure locations have been identified within the Survey Area. Of these 13 structure locations, 12 locations are no longer present. Many of the structures appear to date from the late 1890s to the early 1900s and were subsequently destroyed, with locations converted to agricultural uses between the 1950s and 1970s. One structure (S19) was first observed on aerial photographs in the late 1950s/early 1960s, and is still present in 2023 aerial photographs.

The aerial photograph review also confirmed that nearly all of the Survey Area was in cultivated row crops at some point from the early 1950s to the present. In the last 30 years, more land in the Survey Area has been taken out of crop production and put into grasslands/herbaceous land use.

5.0 RESULTS OF THE ARCHAEOLOGICAL SURVEY

The pedestrian survey was conducted by Tetra Tech archaeologists October 31 through November 6, 2023. Additional pedestrian survey and shovel probing was conducted by Tetra Tech archaeologists on May 29 and 30, 2024.

5.1 RESULTS OF FIELD SURVEYS

Approximately 74 percent (2,428 acres [983 hectares]) of the Survey Area is cultivated cropland, and non-cultivated areas make up approximately 26 percent (865 acres [350 hectares]) of the Survey Area. Cultivated cropland included row crops such as corn and soybeans (Appendix C, Photographs 1 through 8). Ground surface visibility ranged from 60 to 100 percent in fields that had been tilled, and ranged from 10 to 30 percent in fields that had not been tilled or were planted with a cover crop.

The non-cultivated areas within the Survey Area consist predominantly of grasslands/herbaceous (567 acres [230 hectares]), trees (112 acres [45 hectares]), and wetlands and riparian (108 acres [44 hectares]). The remaining 78 acres (32 hectares) consists of public road and railroad rights-of-way (ROWs) (Appendix C, Photographs 9 through 19). Within non-cultivated areas, ground surface visibility ranged from 0 to 25 percent.

During the Fall 2023 pedestrian survey, a light (less than 1 inch [2.5 centimeters]) snow fall covered the Survey Area on the morning on November 1, 2023. All pedestrian survey activity was halted until the afternoon of November 2, 2023, when nearly all snow had melted from cultivated fields. The limited snow cover (Appendix C, Photographs 4 and 5) did not inhibit the survey teams' ability adequately assess the presence or absence of cultural materials on the surface. All snow was melted by the end of the day on November 2, 2023, with the exception of minor accumulations on the north side of tree rows (Appendix C, Photographs 14, 17, and 18).

The location of the 13 historically documented structures within the Survey Area were reviewed during the pedestrian survey. As noted in Section 4.2, historically documented features were georeferenced and loaded on the Apple iPad operating ESRI Field Maps for reference during field survey. As the crew chief navigated through

the Survey Area, they notified the survey crew when coming onto the location of a historically documented feature. Based on the time frame when the historically documented features were reported (circa 1890s to circa 1950s) and their likely association with farming activities, medium to large artifact scatters consisting of glass, ceramics, iron, and masonry materials would be expected at locations with remaining archaeological evidence. It is not uncommon for historically documented features of this timeframe and association to not have any archaeological evidence present. Reasons for a lack of archaeological evidence include: historical documents may be inaccurate and no actual structure was ever present; the duration of habitation may have been short and may not have resulted in leaving any perceptible archaeological evidence; structures may have been sold off for materials or moved off site; or, structures may have been burned and buried in place.

During the survey, Tetra Tech identified three Native American isolated finds, one Euro-American artifact scatter, and one Euro-American granary (Appendix A, Figures 3 and 4; Table 4). Additional details are provided in the sections below.

Table 4. Newly Documented Cultural Resources within the Survey Area.

Site No.	Type	Affiliation and Description	Recommended NRHP Status
32RI930	Architectural	Euro-American Granary	Not Eligible
32RI931	Historic Archaeological	Euro-American Artifact Scatter	Unevaluated
32RIX409	Archaeological	Native American (Late Archaic – Pelican Lake) Isolated Find	Not Eligible
32RIX410	Archaeological	Native American (Period Unknown) Isolated Find	Not Eligible
32RIX411	Archaeological	Native American (Late Archaic – Pelican Lake) Isolated Find	Not Eligible

5.1.1 Site 32RI930

Site 32RI930 is a modest Euro-American grain storage building (granary) located off County Road 6, approximately 0.2 mile (0.3 kilometer) east of the intersection of County Road 6 and 172nd Avenue Southeast in the northwest quarter of Section 14 of Abercrombie Township (Appendix A, Figures 3 and 4 – C4; Appendix C, Photographs 20 through 26). The granary is sited at the northern portion of the parcel; there are no other buildings or structures on the parcel. The GLO historic land patent records indicate Ole T. Tew was the landowner in 1882, and John Sakerson acquired the property in 1887 (Bureau of Land Management 1882 and 1887). When the granary was constructed, the property was owned by Lee Farms and is currently owned by Mr. Micheal Lee family.

The granary is comprised of two elements: 1) a tall, one-story gabled element, and 2) an attached, shorter, shed roof element at the east elevation that was accessed by door, which is no longer present. All exterior walls are clad in shiplap siding. Other openings at the gable roof elevation includes a small, square opening under the gable of

the taller element along with two smaller square openings at the lower wall of the east (main) façade. The west elevation has an identical square opening under the gable of the taller gabled element, and one small, square window opening at the lower wall; the shed roof element contains a small square opening at the west elevation. Square, metal, hinged openings are at the roof's slope on the south side, in the closed position. The interior of the building is unfinished; as is the floor, which is dirt in some places and wood plank in others. There are two interior spaces, separated by an interior wood wall; the shed roof interior space is smaller than the gabled interior space.

The building first appears on 1961 FSA aerial photographs (see Section 4.2.6; Appendix B, Map 6), north of three other buildings on the parcel and just south of what is currently County Road 6. The available written historical data did not reveal the original construction date or purpose of the building; however, the current landowner (Mr. Michael Lee) stated that his father and uncle (who were previous owners) constructed the building in the 1950s for use as grain storage. Mr. Lee indicated there was no residence on the parcel, rather it contained the granary and a few buildings, including another wood granary, and a shed/shop that was destroyed by fire. Mr. Lee stated the existing granary never had plumbing or electricity and recollects that the building was constructed at its current site to store oats, wheat, and barley in the fall, which were taken to market in the following spring and summer. It has not been used since the 1960s and is in disrepair and generally poor condition.

The building is not associated with significant events that have contributed to the broad patterns of the history of North Dakota, Richland County, or Abercrombie Township, and is therefore not recommended eligible under NRHP Criterion A. It is not associated with the life of a person or persons important to our history and research has revealed no associations between the granary and important historical figures. Therefore, the building is recommended not eligible for listing in the NRHP under Criterion B. The building is a simple, modest, utilitarian building, constructed of materials and style commonly found throughout this region, and it does not embody distinctive characteristics of a type, period, or method of construction. Further, the building does not possess characteristics that represent the work of a master, nor does it possess high artistic values that rise to the level of significance to be eligible under NRHP Criterion C. As such it is recommended not eligible under Criterion C. It is not known to have yielded, or be likely to yield, information important in prehistory or history and is not recommended eligible under NRHP Criterion D.

The feature lacks sufficient significance and Tetra Tech recommends it not eligible for the NRHP under any of the criteria.

5.1.2 Site 32RI931

Site 32RI931 is a moderately dense Euro-American artifact scatter identified during the pedestrian survey in the [redacted] portion of the Survey Area (Appendix A, Figures 3 and 4 – B3). The site was observed on a level plain within a fallow agricultural field with 25 percent surface visibility (Appendix C, Photographs 27 and 28). The pedestrian survey identified approximately 300 artifacts consisting of historic glass, ceramic (whiteware, stoneware, and brick) and metal scrap (Appendix C, Photographs 29 through 37). Diagnostic artifacts observed include a

Thatcher Glass Manufacturing Company bottle produced circa 1944 to 1985 (Lockhart 2007) (Appendix C, Photograph 30), a “PONDS” milk glass cosmetic jar produced circa 1905-1950s (McCarthy 2022) (Appendix C, Photograph 31), and an “OVENSERVE WARE” ceramic base produced circa 1930s (Gonzalez 2024) (Appendix C, Photograph 36). A modern 1980s aluminum Shasta soda can was also observed (Shasta Beverages Inc. 2019; Appendix C, Photograph 37). No infrastructure (i.e., power line poles or driveways) or features (i.e., foundations or extant structures) were observed at this location.

A structure (S06) was observed in the approximate location of 32RI931 on the 1897 W.M. House atlas and was subsequently observed on the 30-minute 1904 USGS Wahpeton, North Dakota Topographic Quadrangle and the 1910 Alden Publishing Co. plat (see Sections 4.2.2 through 4.2.4). A structure in the location of the site was observed on 1952 AMS aerial photography; however, the structure was not observed on 1961 FSA aerial photography (see Sections 4.2.5 and 4.2.6). The area around the former structure appeared to be vegetated from the late 1960s through 2020. By October 2023, the vegetation was no longer present, and the area appeared fallow.

The NRHP eligibility of Site 32RI931 was evaluated using the framework and requirements discussed in *Farms in North Dakota: A Historic Context* (SHSND 2014), and guidelines for applying NRHP criteria for evaluation (National Park Service [NPS] 1990).

The artifacts observed on the surface of the site were likely the result of the removal of the structure in the late 1950s/early 1960s, and the grubbing of the location in the early 2020s. It is unknown how the former structure was removed from the site (i.e., burned and buried or hauled offsite). It is possible that intact features may be present on site. Due to the removal of the former structure, the integrity of Site 32RI931 has been significantly reduced. While the overall integrity is poor, the site retains integrity of setting, as the surrounding area has primarily remained agricultural since its original settlement. The physical location of the farmstead still exists; however, the structure and tree rows around the former structure are no longer present at the site location. As a result, the site retains limited integrity of location. Since the structure and tree lines associated with the farmstead are no longer extant, the layout of the farmstead is not readily apparent, and the site’s integrity of design is poor. Similarly, because the structure associated with the farmstead is no longer present, the integrity of materials and workmanship of the former structure is severely reduced. Due to the removal of the structure, the site has no integrity of materials and workmanship. Since the site lacks the structure associated with the farmstead, the site’s integrity of feeling and association are also poor.

Site 32RI931 was first observed in the 1897 W.M. House atlas and is likely associated with homesteading and agriculture within southeastern North Dakota during the Second Dakota Boom. Both homesteading and agriculture have been identified as historically significant in North Dakota (SHSND 2014). Homesteading is considered significant as it was the driving phenomenon of permanent settlement of the state, while agriculture is considered significant as the basis of homesteading and of the region’s economy. While Site 32RI931 is associated with

homesteading and agriculture within North Dakota, the site is not likely to be considered historically important within either of the significant contexts. The farmstead was not an early settlement of the area nor was it unique in its pattern of settlement. The area of the site was first settled at least 25 years prior, with additional settlement occurring in the last two decades of the 1800s as a result of the construction of the nearby railroad (see Section 3.2.3). Specific agricultural practices at the site are unknown; however, it was most likely wheat that was grown (Robinson 1966), which was common for the area and the Red River Valley of North Dakota. Agricultural activities at the site would not likely be considered historically important for the history of agriculture within North Dakota. The site would not likely be considered historically important or considered eligible for NRHP listing under Criterion A: Events.

In 1897 and 1910, the quarter section containing Site 32RI931 was owned by Ingebrigt M. Lakkin (Ingebret Lokken). A review of U.S. Naturalization records revealed that Mr. Lokken immigrated from Norway to the United States in 1860. North Dakota marriage records revealed he was married in Richland County in 1892. Mr. Lokken's occupation is unknown; however, as a Norwegian immigrant, it is likely that he was a farmer. Mr. Lokken was not listed in the 1910 Alden Publishing Co. Atlas resident directory, nor were any residents listed within Section 10 of Abercrombie Township. The 1922 H.E. Wilson's Guide and Atlas to Richland County, North Dakota does not include illustrations of structures; however, it revealed that the quarter section was owned by J.J. Hull. According to J.J. Hull's obituary, he was born in 1854 and moved to Wahpeton in 1893. Mr. Hull was listed in the title owner index and the resident taxpayer list in the 1922 H.E. Wilson's Guide and Atlas to Richland County. It is unknown if the structure associated with the site was occupied all the way to the 1950s. Based on a review of available historical documents and a review of state and regional history, there is no evidence that indicates Ingebret Lokken or his family, or J.J. Hull or his family, would be considered historically significant or important. There is no evidence that Ingebret Lokken or J.J. Hull innovated agricultural practices within the region, completed unique or outstanding accomplishments, or are well known on a national level (Callan 1938; Mitskog 1970). As Site 32RI931 is not associated with a historically important individual, the site would not be considered significant under Criterion B: Important Persons.

No standing structures remain at the site. As a result, the site would not be considered significant under Criterion C: Design/Construction.

The archaeological materials identified at Site 32RI931 consist of materials that would be standard on a farmstead during the first half of the 1900s. Intact features may exist at the site and additional subsurface investigations would be warranted to evaluate the site under Criterion D – the potential for the site to have yielded, or may be likely to yield, information important in prehistory or history. Therefore, Tetra Tech recommends the site be considered unevaluated for listing in the NRHP.

5.1.3 Site 32RIX61

Tetra Tech did not identify any historical records of the [redacted] in county or local historical documents, and no evidence was observed during the field survey (Appendix A, Figures 3 and 4 – B2). Approximately 4.3 acres (1.7 hectares) of the 8.7-acre (3.5-hectare) site lead is located within the [redacted], which consists of a [redacted] (Appendix C, Photographs 14 and 15). Approximately 2.4 acre (1.0 hectare) of the site lead located beyond the [redacted] is located within a [redacted] (Appendix C, Photograph 14). The [redacted] which is not present in the 1952 AMS aerial photograph or 1961 FSA aerial photographs, was likely constructed during the development of the [redacted]. No evidence of historic features was observed in the remaining 2.0 acres (0.8 hectare) of the site.

The integrity of the site lead is currently unknown due to the absence of cultural materials or features on the surface. No subsurface probing has occurred at the site lead and the potential for intact subsurface deposits is unknown. Further work would be warranted to determine the site lead's integrity. Tetra Tech recommends the site remain unevaluated for listing in the NRHP.

5.1.4 Site 32RIX409

Site 32RIX409 is a prehistoric lithic isolated find identified during the pedestrian survey of the northern portion of the Survey Area (Appendix A, Figures 3 and 4 – A3). The isolated find was observed on a level plain within a cultivated agricultural field with 50 percent surface visibility (Appendix C, Photographs 42 and 43). An intensive surface survey of the area was conducted at 5-meter (16.4-foot) interval transects and failed to identify additional artifacts on the surface. The lithic isolated find consists of one projectile point manufactured from quartzite (Bakken 2011). The projectile point was broken immediately below the shoulders, but based on the small portion of notching that remains, the point is similar in morphology to Pelican Lake points, which date to the Late Archaic Period circa 3,500 to 2,000 B.P (Perino 1979; Morrow 2016) (Appendix C, Photograph 44). An intensive surface survey of the area was conducted at 5-meter (16.4-foot) interval transects and failed to identify additional artifacts on the surface.

Nine shovel probes were excavated at the isolated find in May 2024; one shovel probe was placed at the find spot, and eight shovel probes were placed in 5-meter (16.4 feet) and 10-meter (32.8 feet) intervals from the find spot in the approximate cardinal directions (Appendix D). The shovel probes revealed a soil profile similar to the Hegne series (USDA-NCRS 2024b) (Appendix C, Photograph 45). An A/Bp horizon was observed extending to depths of 19 to 25 centimeters (7.5 to 9.8 inches) bgs. The shovel probes were terminated in the B horizon, which was observed extending to depths of 30 to 38 centimeters (11.8 to 15.0 inches) bgs. All shovel probes were negative for cultural materials.

The isolated find is located within agricultural cropland and archaeological deposits present have likely been impacted by agricultural activities. It is likely that any cultural material in the vicinity of the find spot would be exposed on the surface with little potential for significant intact subsurface cultural deposits. All shovel probes were

negative for cultural materials. Due to the absence of identified archaeological materials and a low potential for significant intact subsurface deposits, the isolated find does not provide significant archaeological research potential or information. As a result, the isolated find would not be significant under Criterion D: Archaeological Potential and is recommended not eligible for listing in the NRHP.

5.1.5 Site 32RIX410

Site 32RIX410 is a prehistoric lithic isolated find identified during the pedestrian survey of the eastern portion of the Survey Area (Appendix A, Figures 3 and 4 – C4). The isolated find was observed on a level plain within a cultivated and tilled agricultural field with 90 to 100 percent surface visibility (Appendix C, Photographs 46 and 47). An intensive surface survey of the area was conducted at 5-meter (16.4-foot) interval transects and failed to identify additional artifacts on the surface. The lithic isolated find consists of two tertiary flakes approximately 23 meters (75.5 feet) apart, both manufactured from Swan River Chert (Bakken 2011) (Appendix C, Photographs 48 and 49). Due to inundated field conditions, Tetra Tech was unable to shovel probe at 32RIX410 in May 2024.

The isolated find is located within agricultural cropland that is periodically flooded due to poor drainage. Archaeological deposits present have likely been impacted by agricultural activities. It is likely that any cultural material in the vicinity of the find spot would be exposed on the surface with little potential for significant intact subsurface cultural deposits. Due to limited identified archaeological materials and a low potential for significant intact subsurface deposits, the isolated find does not provide significant archaeological research potential or information. As a result, the isolated find would not be significant under Criterion D: Archaeological Potential.

5.1.6 Site 32RIX411

Site 32RIX411 is a prehistoric lithic isolated find identified during the pedestrian survey of the eastern portion of the Survey Area (Appendix A, Figures 3 and 4 – C4). The site was observed on a level floodplain within a fallow agricultural field with 90 to 100 percent surface visibility (Appendix C, Photographs 50 and 51). An intensive surface survey of the area was conducted at 5-meter (16.4-foot) interval transects and failed to identify additional artifacts on the surface. The lithic isolated find consists of one projectile point manufactured from Swan River Chert (Bakken 2011). The projectile point is similar in morphology to Pelican Lake points, which date to the Late Archaic Period circa 3,500 to 2,000 B.P (Perino 1979; Morrow 2016) (Appendix C, Photograph 52). Due to inundated field conditions, Tetra Tech was unable to shovel probe at 32RIX411 in May 2024.

The isolated find is located within agricultural cropland that is periodically flooded due to poor drainage. Archaeological deposits present have likely been impacted by agricultural activities. It is likely that any cultural material in the vicinity of the find spot would be exposed on the surface with little potential for significant intact subsurface cultural deposits. Due to limited identified archaeological materials and a low potential for significant intact subsurface deposits, the isolated find does not provide significant archaeological research potential or information. As a result, the isolated find would not be significant under Criterion D: Archaeological Potential.

6.0 DISCUSSIONS AND RECOMMENDATIONS

The Class I Inventory identified one previously documented historical archaeological site lead (32RIX61 – [redacted]) in the [redacted] of the Survey Area, [redacted] Evidence of Site Lead 32RIX61 ([redacted]) was not observed in the Survey Area during the pedestrian survey; [redacted] are located within the extent of the site. If the site were present in this location, the construction of the [redacted] would have likely destroyed the site. Seven additional resources, including five architectural, one historic archaeological, and one archaeological were recorded in the Study Area, outside of the Survey Area. These resources are currently unevaluated for listing in the NRHP. These resources are at least 0.5 mile (0.8 kilometer) from the Survey Area. **Based on this distance, it is Tetra Tech's opinion these resources will not be directly or indirectly impacted by the proposed Project.**

Pedestrian surveys were undertaken in late October/early November 2023. Approximately 74 percent (2,428 acres [983 hectares]) of the Survey Area is cultivated cropland, and non-cultivated areas make up approximately 26 percent (865 acres [350 hectares]) of the Survey Area. Cultivated cropland included row crops such as corn and soybeans. Ground surface visibility ranged from 60 to 100 percent in fields that had been tilled and ranged from 10 to 30 percent in fields that had not been tilled or were planted with a cover crop.

The non-cultivated areas within the Survey Area consist predominantly of grasslands/herbaceous (567 acres [230 hectares]), trees (112 acres [45 hectares]), and wetlands and riparian (108 acres [44 hectares]). The remaining 78 acres (32 hectares) consists of public road and railroad (ROWs). Within non-cultivated areas, ground surface visibility ranged from 0 to 25 percent. Based on Tetra Tech's review of historical aerial photography, all portions of the Survey Area have been cultivated at some point since the early 1950s. The potential for intact cultural materials to be present in the typical agricultural plowzone (approximately 12 to 18 inches [30.5 to 45.7 centimeters] bgs) is presumed to be low within the Survey Area. **Tetra Tech developed an unanticipated discoveries plan to facilitate documentation and coordination with the SHSND if cultural materials are inadvertently uncovered during construction.**

Tetra Tech documented five cultural resources within the Survey Area, including three Native American chipped stone isolated finds (32RIX409, 32RIX410, and 32RIX411), one Euro-American granary (32RI930), and one Euro-American artifact scatter (32RI931). Evidence of the previously recorded Site Lead 32RIX61 ([redacted]) was not observed in the Survey Area. Additional pedestrian surveys were undertaken in May 2024 to resurvey areas that had poor surface visibility during the pedestrian survey completed in late October/early November 2023. Shovel probing was also undertaken in May 2024 to assess the presence or absence of cultural material at the Native American four isolated finds recorded in 2023.

Tetra Tech's eligibility recommendations and avoidance recommendations are presented below.

- Site 32RI930: **Tetra Tech recommends the site as not eligible under Criteria A, B, C, and D; avoidance of the site is not recommended.**
    - Site 32RI930 consists of an isolated granary that first appears on 1961 FSA aerial photography, north of three other buildings formerly on the parcel. The current landowner stated that his father and uncle (who were previous owners of the parcel), constructed the building in the 1950s for use as grain storage and it has not been used since the 1960s. The other buildings formerly located on the site included another wood granary, and a shed/shop that was destroyed by fire. The granary is now unused and contains trash (old bed frames, crates, and wood). It is in disrepair and generally poor condition.

      The building is not associated with significant events that have contributed to the broad patterns of the history of North Dakota, Richland County, or Abercrombie Township, and is therefore not recommended eligible under NRHP Criterion A. It is not associated with the life of a person or persons important to our history and research has revealed no associations between the granary and important historical figures. Therefore, the building is recommended not eligible for listing in the NRHP under Criterion B. The building is a simple, modest, utilitarian building, constructed of materials and style commonly found throughout this region, and it does not embody distinctive characteristics of a type, period, or method of construction. Further, the building does not possess characteristics that represent the work of a master, nor does it possess high artistic values that rise to the level of significance to be eligible under NRHP Criterion C. As such it is recommended not eligible under Criterion C. It is not known to have yielded, or be likely to yield, information important in prehistory or history and is not recommended eligible under NRHP Criterion D.

- Site 32RI931: **Tetra Tech recommends the site remain unevaluated under Criterion D; the Project has avoided impacts to the site.**
    - Site 32RI931 consists of a surface Euro-American artifact scatter associated with a former farmstead initially observed on the 1897 W.M. House atlas. A structure in the location of the site was observed on 1952 AMS aerial photography; however, the structure was not observed on 1961 FSA aerial photography. Vegetation outlining the extent of the farmstead was observed from 1990 to 2020 on Google Earth Pro aerial photography. By October 2023, the trees were no longer present and the area appeared fallow. The artifacts observed on the surface of the site are likely the result of the removal of the structure in the late 1950s/early 1960s, and the grubbing of the location in the early 2020s. The age of the artifacts observed correlate with the historic document review. It is unknown how the former structure was removed from the site (i.e., burned and buried or hauled offsite). It is possible that intact features may be present on site. Due to the removal of the former structure, the integrity of Site 32RI931 has been severely reduced.

The site is not associated with significant events that have contributed to the broad patterns of the history of North Dakota, Richland County, or Abercrombie Township, and is therefore not recommended eligible under NRHP Criterion A. It is not associated with the life of a person or persons important to our history and research has revealed no associations between the site and important historical figures. Therefore, the site is recommended not eligible for listing in the NRHP under Criterion B. The archaeological materials identified at Site 32RI931 appear to consist of materials that would be standard on a farmstead during the first half of the 1900s. Intact features may exist at the site and additional subsurface investigations would be warranted to evaluate the site under Criterion D – the potential for the site to have yielded, or may be likely to yield, information important in prehistory or history. Therefore, the site is recommended as unevaluated for listing in the NRHP. The current Project layout avoids impacts to the site. Any future changes, if required, will also avoid impacts to the site.

- Site 32RIX61: **Tetra Tech recommends the site remain unevaluated for listing on the NRHP; the Project has avoided impacts to the site.**
  - Tetra Tech did not identify any historical records of the [redacted] in county or local historical documents, and no evidence of the [redacted] was observed during the field survey. Approximately 4.3 acres (1.7 hectares) of the 8.7-acre (3.5-hectare) site lead is located within the [redacted], which consists of a [redacted]. Approximately 2.4 acres (1.0 hectare) of the site lead located beyond the [redacted] is located within a [redacted] The [redacted] which is not present in 1952 AMS aerial photography or the 1961 FSA aerial photography, was likely constructed during the development of the [redacted]. No evidence of historic features was observed in the remaining 2.0 acres (0.8 hectare) of the site. Tetra Tech recommends the site remain unevaluated for listing in the NRHP. The current Project layout avoids impacts to the site. Any future changes, if required, will also avoid impacts to the site.

- Sites 32RIX409, 32RIX410, and 32RIX411: **Tetra Tech recommends the sites as not eligible under Criterion D; avoidance of the sites is not recommended.**
  - Site 32RIX409 consists of a surface isolated find within a cultivated field. Evidence of cultivation was observed at the location of the isolated find as far back as 1952. Nine shovel probes were placed at the site; all failed to identify additional cultural materials in the subsurface. Due to the absence of identified archaeological materials and a low potential for significant intact subsurface deposits at the site, it would not provide significant archaeological research potential or information. As a result, the site would not be significant under Criterion D: Archaeological Potential and is recommended not eligible for listing in the NRHP.

Sites 32RIX410 and 32RIX411 consist of surface isolated finds within cultivated fields. Evidence of cultivation was observed at the locations of the isolated finds as far back as 1952. Planned shovel probing could not be performed due to standing water at the sites. However, the absence of shovel probing data at these sites does not change Tetra Tech's eligibility recommendations. Due to the absence of identified archaeological materials and a low potential for significant intact subsurface deposits at these sites, they would not provide significant archaeological research potential or information. As a result, the sites would not be significant under Criterion D: Archaeological Potential and are recommended not eligible for listing in the NRHP.

7.0 REFERENCES

Alden Publishing Company.

1910 Standard Atlas of Richland County, North Dakota. Alden Publishing Company, Chicago, Illinois.

Army Map Service (AMS).

1952 Historical Aerial Photography. Provided by U.S. Geological Survey. Richland County, North Dakota.

Bakken, K.E.

2011 Chipped Stone Raw Materials. *Stone Tools of Minnesota*, Chapter 6. Wapsi Valley Archaeology, Inc. Anamosa, Iowa.

Beardsley, R. K., P. Holder, A. D. Krieger, B. J. Meggers, J. B. Rinaldo, and P. Kutsche.

1956 Functional and Evolutionary Implications of Community Patterning. *Society for American Archaeology*, Memoir 11:129-157.

Bleier, Amy

2006 *Bridge #123-14.0: A Class III Cultural Resource Inventory in Richland County, North Dakota*. Number: 009872. On file at the State Historic Preservation Office, Bismarck, North Dakota.

Bluemle, J.

2000 *The Face of North Dakota*. Third Edition. North Dakota Geological Survey. Education Series 26.

Bureau of Land Management (BLM)

1882 State Volume Patent No. 1307. Electronic document, https://glorecords.blm.gov/details/patent/default.aspx?accession=ND0590__.108&docClass=STA&sid=nkb05cgl.vx4#patentDetailsTabIndex=0, accessed August 12. 2024.

1887 State Volume Patent No. 2703 Electronic document, https://glorecords.blm.gov/details/patent/default.aspx?accession=ND0590__.108&docClass=STA&sid=nkb05cgl.vx4#patentDetailsTabIndex=0, accessed August 12. 2024.

Callan, F.G.

1938 A History of Richland County, North Dakota. Works Progress Administration of North Dakota. Electronic document, https://digitalhorizonsonline.org/digital/collection/ndsl-books/id/9929, accessed February 29. 2024.

Capace, N.

2001 Encyclopedia of North Dakota. Somerset Publishers, St. Clair Shores, Michigan.

Committee of the Centennial History of Galchutt (CCHG).

1982 *History of Galchutt, North Dakota, 1882-1982*. Digital Horizons (North Dakota Histories Collection, ND State Library). Electronic document, https://digitalhorizonsonline.org/digital/collection/ndsl-books/id/13768, accessed March 7, 2024.

DeCarlo, P.J.

2014 US – Dakota War of 1862. Minnesota Historical Society. Electronic document, https://www.mnopedia.org/event/us-dakota-war-1862, accessed March 4, 2024.

DeMallie, R. (editor).

2001 *Plains*. Handbook of North American Indians, Vol. 13, Pt. 1. Smithsonian Institution, Washington, D.C.

Dennis, M.L.

2016 National Register of Historic Places Multiple Properties Nomination Form for Common Farm and Ranch Barns in North Dakota. M.L. Dennis Consulting, Rapid City.

Drache, M.

1967 Bonanza Farming in the Red River Valley. In *MHS Transactions*, Series 3, Number 24, 1867-1968 season. Manitoba Historical Society. Electronic document, https://www.mhs.mb.ca/docs/transactions/3/bonanzafarming.shtm, accessed March 5, 2024.

Dodson, Emily, Jeffery Holland, Mary Beth Derrick, and Larissa Thomas

2022 *Class III Archaeological Inventory Survey Report: WBI Energy Transmission, Inc. Wahpeton Expansion Project, Cass and Richland Counties, North Dakota*. Number 019949. On file at the State Historic Preservation Office, Bismarck, North Dakota.

Farm Service Agency (FSA)

1961 Historical Aerial Imagery. Provided by U.S. Geological Survey. Available online, https://earthexplorer.usgs.gov/, accessed August 13, 2024.

Fredlund, D.

1973 *1971 Archaeological Survey, Western Energy Coal Company Lands, Rosebud County, Montana*. Montana Statewide Archaeological Survey, University of Montana. Submitted to Western Energy Coal Company, Butte, Montana.

General Land Office (GLO) Survey Plat Maps of North Dakota.

1871 General Land Office Survey Plat Maps of North Dakota. Electronic document, https://survey.dwr.nd.gov/, accessed March 1, 2024.

Gilbreath, W.C.

1911 Richland County History. Electronic document, https://genealogytrails.com/ndak/richland/counthistory.html, accessed March 1, 2024.

Gilman, R.R.

1970 *Last Days of the Upper Mississippi Fur Trade*. Minnesota History, 42:122-140.

Gonzalez, M.

2024 OvenServe by Homer Laughlin. Electronic document, http://www.laurelhollowpark.net/hlc/ovenserve.html, accessed March 18, 2024.

Gordon, Sean

2016 *I-29 Reconstruction Project; A Class III Cultural Resource Inventory in Richland County, North Dakota*. Number: 017072. On file at the State Historic Preservation Office, Bismarck, North Dakota.

Google Earth Pro

2025 Version 7.3.6. Rural Richland County. Imagery Layers 1990 – 2020.

Gregg, M.

1994. *Horner-Kane Site (32RY77) Archeological Excavations, Grahams Island State Park, Ramsey County, North Dakota, 1991 Field Season*. Department of Anthropology, University of North Dakota, Grand Forks. Submitted to the Bureau of Reclamation, Bismarck.

Gregg, M. L., D. Meyer, P. R. Picha, and D. G. Stanley.

1996 Archeology of the Northern Plains. *Archeological and Bioarcheological Resources of the Northern Plains*, pp. 77-90. A Volume in the Central and Northern Plains Archeological Overview, Arkansas Archeological Survey Research Series No. 47.

Haidet, M.

2017 "The Peak of the Minneapolis Flour-milling Industry coincided with World War 1". *Minnpost*. Electronic document, https://www.minnpost.com/mnopedia/2017/10/peak-minneapolis-flour-milling-industry-coincided-world-war-i/, accessed April 15, 2024.

Harken, Nick

2006 *A Class III Cultural Resources Inventory for Vantage Point - Red River Rural Telephone Association – Buried Cable, Richland County, North Dakota*. Number 009676. On file at the State Historic Preservation Office, Bismarck, North Dakota.

Hayden, B.

1981 Research and Development in the Stone Age: Technological Transitions among Hunter-gatherers. *Current Anthropology* 22:519-548.

House, W.M.

1897 North Dakota and Richland County Chart. W.M. House, Chicago, Illinois.

H.E. Wilson and Company.

1922 *Wilson's Guide and Atlas to Richland County, North Dakota - Wilkin County, Minnesota, May, 1922*. H.E. Wilson, Publisher, Wahpeton, North Dakota.

Johnson, Lon, Mark Hufstetler, Fredric Quivik, and Charles Roise

1992 *Historic Bridges in North Dakota.* Renewable Technologies, Inc. Number 005920. On file at the State Historic Preservation Office, Bismarck, North Dakota.

Kenney, L.

1995 *The Past is Never Far Away: A History of the Red River Valley Potato Industry*. Red River Valley Potato Growers Association, East Grand Forks, Minnesota.

Kulevsky, Andrea

1996 *Interstate Engineering's Pitcairn Creek Bridge Replacement: A Class III Cultural Resource Inventory in Richland County, North Dakota*. Number: 006449. On file at the State Historic Preservation Office, Bismarck, North Dakota.

Lee, S.

2008 Bonanza Farming in the Red River Valley. Paper presented at the West River History Conference. Rapid City, South Dakota.

Lehmer, D. J.

1971 *Introduction to Middle Missouri Archeology*. Anthropological Papers 1. National Park Service, Washington, D.C.

Lockhart, B., P. Schulz, C. Serr, and B. Lindsey.

2007 The Dating Game: Thatcher Glass Mfg. Co. Electronic document, https://sha.org/bottle/pdffiles/Thatcher_BLockhart.pdf, accessed March 18, 2024.

Malloy, K., J. Holland, S Treloar, L. Thomas, and W. Stanyard.

2022 *Class III Archaeological Inventory Report: WBI Energy Transmissions, Inc. Wahpeton Expansion Project, Cass and Richland Counties, North Dakota*. Manuscript No. 019950. On file at the State Historic Preservation Office, Bismarck, North Dakota.

McCarthy, M. T.

2022 *The History of Cosmetic Jars*. Beach Combing Magazine March/April 2021 Issue. Electronic document, https://www.beachcombingmagazine.com/blogs/news/the-history-of-cosmetic-jars accessed March 18, 2024.

Minnesota Historical Society.

2024 "Great Northern Railway." Minnesota Historical Society. Electronic document, https://www.mnhs.org/hillhouse/learn/great-northern-railway, accessed April 15, 2024.

Mitskog, F.

1970 *A History of Colfax and Area*. Richland County Historical Society.

Morrow, T.

2016 *Stone Tools of Minnesota*. Wapsi Valley Archaeology, Inc.

National Park Service.

1990 How to Apply the National Register Criteria for Evaluation. National Register Bulletin 15. Electronic document, https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf, accessed June 16, 2024.

North Dakota Department of Transportation

1992-1994 *Safety Project Cultural Resource Review*. Manuscript No. 006449. On file at the State Historic Preservation Office, Bismarck, North Dakota.

North Dakota Geological Survey (NDGS).

2016 LiDAR, Galchutt Quadrangle, North Dakota. Electronic document, https://www.dmr.nd.gov/ndgs/SurfaceMap/lidar/24k/Galchutt.pdf, accessed August 2, 2024.

2023 NDGISHUB Surface Geology. Electronic document, https://gishubdata-ndgov.hub.arcgis.com/datasets/46013a21dba248a098e7449b3bccb806/explore?location=46.449570%2C-96.874326%2C13.64, accessed July 9, 2024.

Perino, G.

1979 Guide to the Identification Certain American Projectile Points, Special Bulletin No. 4. Oklahoma Anthropological Society.

Ritterbush, L.W.

1991 Context Document on the Fur Trade of Northeastern North Dakota (Ecozone #16), 1738-1861. Electronic document, https://www.history.nd.gov/hp/PDFinfo/fur-trade-northeast-nd.pdf, accessed March 6, 2024.

Robinson, E.B.

1966 "History of North Dakota." University of North Dakota. Electronic document, https://commons.und.edu/oers/1/, accessed April 9, 2024.

Russell, D.

1982 Initial European Contacts and the Fur Trade to 1767 on the Saskatchewan River. *Nipawin Reservoir Heritage Study, Vol. 3*, pp. 88-115. Saskatchewan Research Council Publication No. C-805-25-E-82, Saskatoon.

Schmidt, A. J. and A. C. Vermeer.

2009 *Railroads in North Dakota, 1872-1956*. Multiple Property Documentation Form. National Park Service, Washington, D.C.

Severson, K. and C. Sieg.

2006. *The Nature of Eastern North Dakota: Pre-1880 Historical Ecology*. North Dakota Institute for Regional Studies, North Dakota State University.

Shasta Beverages, Inc.

2019 "History." Shasta Beverages, Inc. Electronic document, https://www.shastapop.com/history/, accessed March 18, 2024.

State Historical Society of North Dakota (SHSND).

2008 *North Dakota Comprehensive Plan for Historic Preservation: Archaeological Component*. Electronic document, http://history.nd.gov/hp/stateplan_arch.html, accessed March 6, 2024.

2014 Farms in North Dakota: A Historic Context. Electronic document, https://www.history.nd.gov/hp/PDFinfo/Farms-in-North-Dakota-Part1.pdf, accessed March 5, 2024.

2015 Historic Preservation in North Dakota, 2010-2015: A Statewide Comprehensive Plan. Electronic document, http://history.nd.gov/hp/pdfinfo/nd2009comphpplan.pdf, accessed March 12, 2024.

2020 North Dakota SHPO Guidelines Manual for Cultural Resource Inventory Projects. Electronic document, https://www.history.nd.gov/hp/PDFinfo/North-Dakota-SHPO-Guidelines-Manual-for-Cultural-Resource-Inventory-Projects.pdf, accessed February 29, 2024.

State of North Dakota.

2024a Chapter 49-22 Energy Conversion and Transmission Facility Siting Act. Electronic document, https://ndlegis.gov/cencode/t49c22.pdf, accessed August 6, 2024.

2024b Chapter 23-06 Care and Custody Of Dead. Electronic document, https://ndlegis.gov/cencode/t23c06.pdf, accessed August 6, 2024.

Steinacher, T., and G. F. Carlson. 1998. The Central Plains Tradition. *Archaeology on the Great Plains*, pp. 308-344. University of Kansas Press, Lawrence, Kansas.

Swenson, F. E., and A. Bleier.

2008 The Sheyenne River Study Unit. North Dakota Comprehensive Plan for Historic Preservation: Archaeological Component. State Historical Society of North Dakota, Bismarck.

United States Census Bureau, Decennial Censuses.

2020. Total Population for North Dakota Cities: 1920 to 2000. Electronic Document, https://www.ndsu.edu/sdc/publications/census/NDcities1920to2000.pdf, accessed March 7, 2024.

2024. 1900 Census: Bulletins. Electronic Document, https://www2.census.gov/library/publications/decennial/1900/bulletins/demographic/40-population-nd.pdf, accessed March 7, 2024.

United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS)

2024a Web Soil Survey. Electronic document, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed August 6, 2024.

2024b Official Soil Series Descriptions. Electronic document, https://soilseries.sc.egov.usda.gov/, accessed August 6, 2024.

United States Department of Agriculture – National Aerial Imagery Program (USDA-NAIP)

2024 National Aerial Imagery Program Photography. Data download naip | Powered by Box, accessed February 27, 2025.

United States Geological Survey (USGS)

1978 Historical Aerial Imagery. Rural Richland County. Available online https://earthexplorer.usgs.gov/, accessed August 13, 2024.

2024 Science in Your Watershed. Electronic document, http://water.usgs.gov/wsc/map_index.html, accessed August 6, 2024.

Vehik, S.C. and R. Vehik.

1977. A Literature Review of Archaeological, Historical, and Paleontological Resources of the Sheyenne River Basin in North Dakota. Submitted to the U.S. Army Corps of Engineers, St. Paul District.

W.M. House.

1897 *North Dakota and Richland County Chart*. W.M. House, Chicago, Illinois.

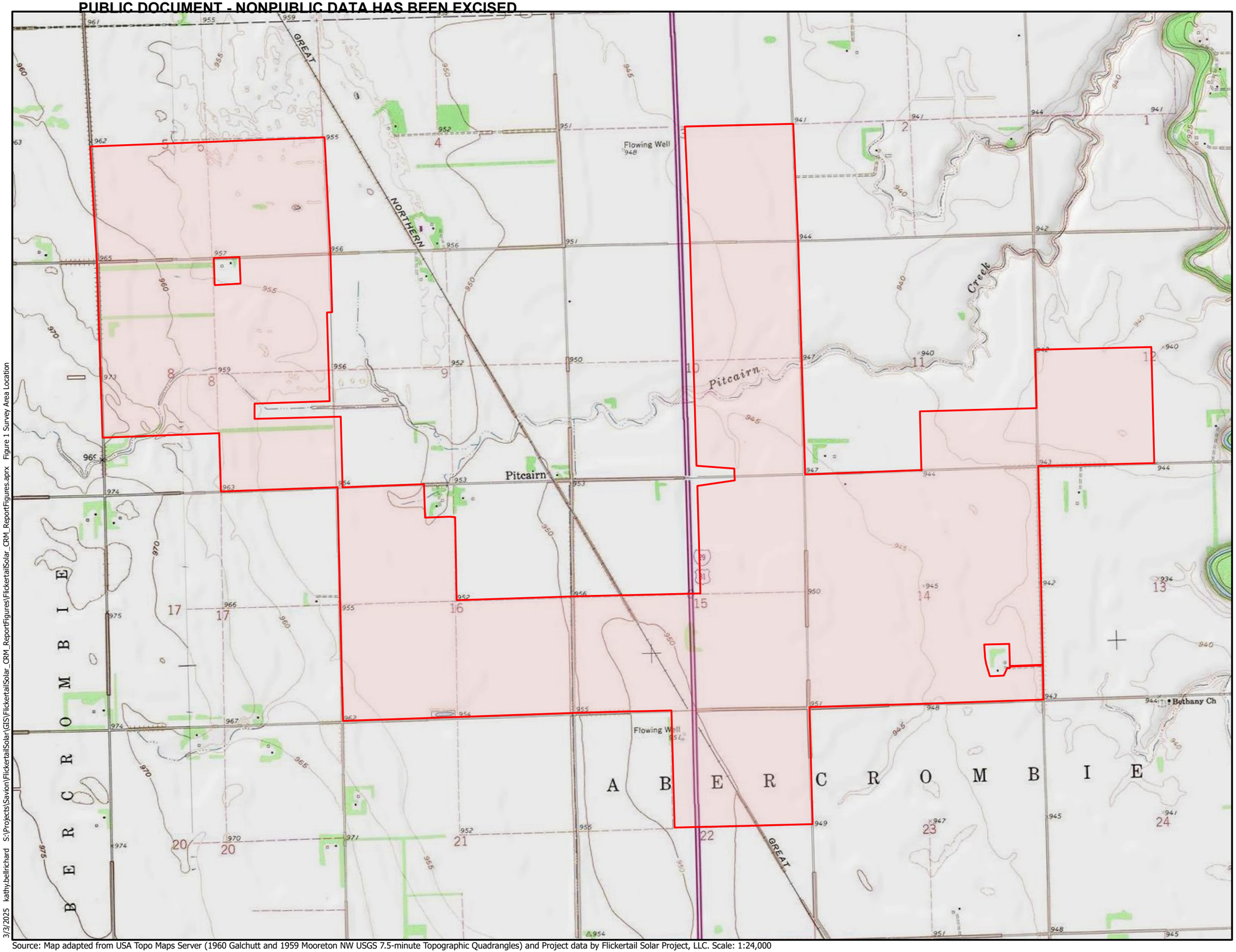
Whitehurst, J.C., J.C. Dahlberg, K. Schweigert, R. Persinger, and M. McFaul.

1989 A Class III Cultural Resource Inventory of a Portion of the Upper Souris River Valley, North Dakota. Cultural Resource and Management, Inc. Bismarck, North Dakota. Submitted to the U.S. Army Corps of Engineers, St. Paul District.

APPENDIX A – FIGURES

PUBLIC DOCUMENT - NONPUBLIC DATA HAS BEEN EXCISED

EXHIBIT 10



Survey Area

0 0.25 0.5 Mile

0 0.25 0.5 Kilometers

N

Figure 1
Survey Area Location

Flickertail Solar
Richland County
North Dakota

TETRA TECH

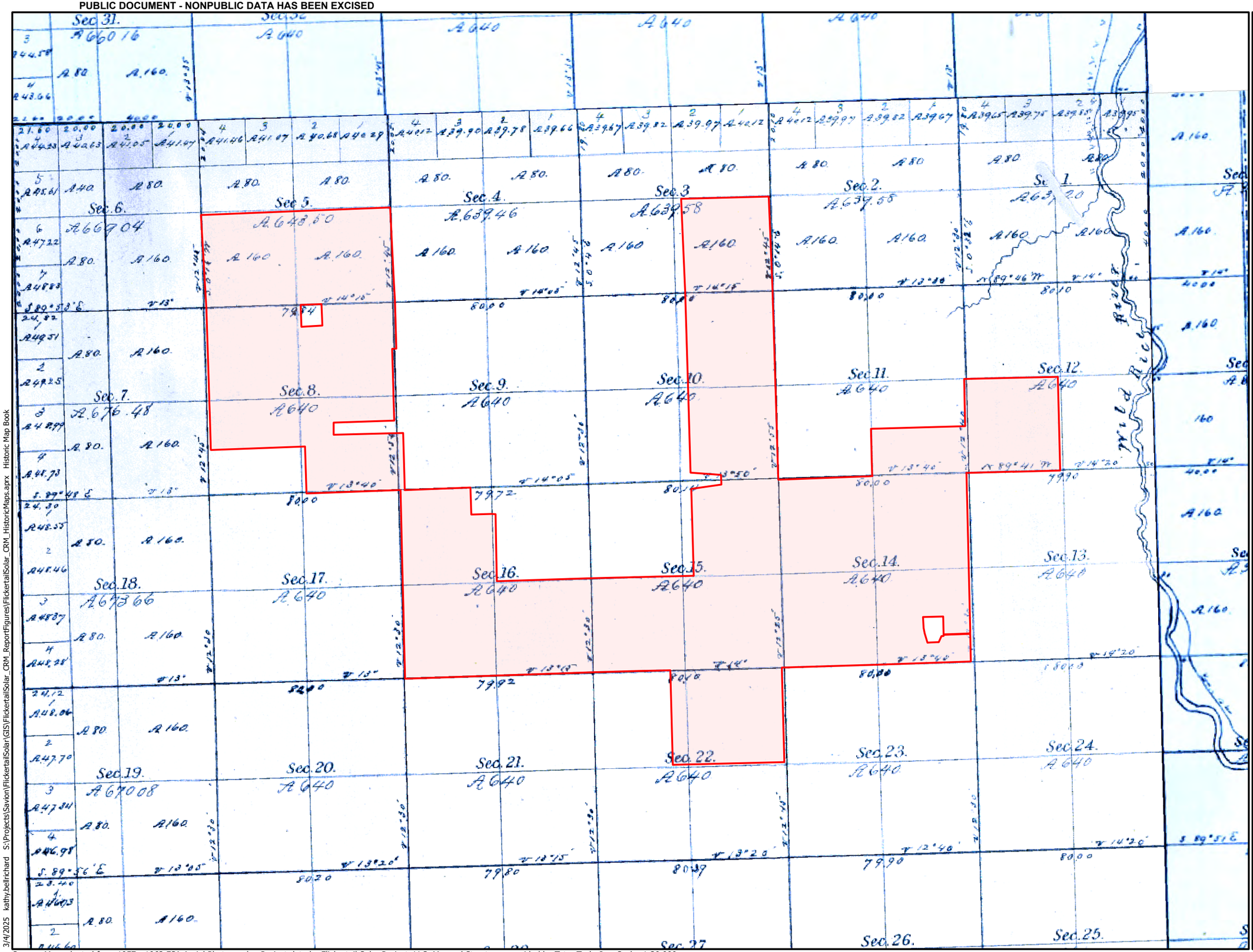
3/3/2025 kathy.bellirichard S:\Projects\Savion\FlickertailSolar\GIS\FlickertailSolar_CRM_ReportFigures\FlickertailSolar_CRM_ReportFigures.aprx Figure 1 Survey Area Location

Source: Map adapted from USA Topo Maps Server (1960 Galchutt and 1959 Mooreton NW USGS 7.5-minute Topographic Quadrangles) and Project data by Flickertail Solar Project, LLC. Scale: 1:24,000

APPENDIX B – HISTORICAL MAP LOG

PUBLIC DOCUMENT - NONPUBLIC DATA HAS BEEN EXCISED

EXHIBIT 10



Survey Area

0 0.25 0.5 Kilometers

0 0.25 0.5 0.75 Mile

N

Map 1
1871 BLM GLO Plat

Flickertail Solar
Richland County
North Dakota

TETRA TECH

3/4/2025 kathy.bellrichard S:\Projects\Savion\FlickertailSolar\GIS\FlickertailSolar_CRM_ReportFigures\FlickertailSolar_CRM_HistoricMaps.aprx Historic Map Book

Source: Map adapted from 1957 - 1962 FSA Aerial Photographs. Project data by Flickertail Solar Project, LLC. Mapped Structures provided by Tetra Tech, Inc. Scale: 1:30,000

APPENDIX C – PHOTOGRAPHS

Photograph: 1 **Orientation:** Facing west **Date:** 11/02/2023 **Description:** An overview of a harvested soybean field in the northwestern portion of the Survey Area.	

Photograph: 2 **Orientation:** Facing south **Date:** 11/03/2023 **Description:** An overview of a cultivated soybean field in the northwestern portion of the Survey Area.	

Photograph: 3 **Orientation:** Facing east **Date:** 11/02/2023 **Description:** An overview of a corn field in the northwestern portion of the Survey Area.	

Photograph: 4 **Orientation:** Facing east **Date:** 11/03/2023 **Description:** An overview of a harvested and tilled cornfield in the southwestern portion of the Survey Area.	

Photograph: 5 **Orientation:** Facing south **Date:** 11/01/2023 **Description:** An overview of a harvested and tilled agricultural field in the southeastern portion of the Survey Area.	

Photograph: 6 **Orientation:** Facing east **Date:** 11/03/2023 **Description:** An overview of a cut wheat field in the southeastern portion of the Survey Area.	

Photograph: 7 **Orientation:** Facing west **Date:** 05/28/2024 **Description:** An overview of an immature corn field in the northwestern portion of the Survey Area.	

Photograph: 8 **Orientation:** Facing east **Date:** 11/03/2023 **Description:** An overview of a harvested corn field in the north central portion of the Survey Area.	

Photograph: 9 **Orientation:** Facing north **Date:** 11/04/2023 **Description:** An overview of a alfalfa field in the southern portion of the Survey Area.	

Photograph: 10 **Orientation:** Facing west **Date:** 11/01/2023 **Description:** An overview of a cut hay field in the northwestern portion of the Survey Area.	

Photograph: 11 **Orientation:** Facing northwest **Date:** 11/06/2023 **Description:** An overview of an grassy field in the southeastern portion of the Survey Area.	

Photograph: 12 **Orientation:** Facing northeast **Date:** 11/05/2023 **Description:** An overview of a hay field in the northern portion of the Survey Area.	

Photograph: 13 **Orientation:** Facing south **Date:** 11/05/2023 **Description:** An overview of a pasture in the northern portion of the Survey Area.	

Photograph: 14 **Orientation:** Facing southeast **Date:** 11/05/2023 **Description:** An overview of a wetland in the central portion of the Survey Area. The northern portion of the reported location of 32RIX61 is in the background (wetland and overpass).	

Photograph: 15 **Orientation:** Facing northwest **Date:** 11/05/2023 **Description:** An overview of a wetland in the southern portion of the Survey Area. The southeastern portion of the reported location of 32RIX61 is in the background at the overpass.	

Photograph: 16 **Orientation:** Facing east **Date:** 11/01/2023 **Description:** An overview of a drainage in the southwestern portion of the Survey Area.	

Photograph: 17 **Orientation:** Facing east **Date:** 11/02/2023 **Description:** An overview of a tree line in the northwestern portion of the Survey Area.	

Photograph: 18 **Orientation:** Facing southeast **Date:** 11/02/2023 **Description:** An overview of a tree line in the northwestern portion of the Survey Area.	

Photograph: 19 **Orientation:** Facing southwest **Date:** 11/07/2023 **Description:** An overview of a wetland in the southern portion of the Survey Area.	

Photograph: 20 **Orientation:** Facing northeast **Date:** 11/01/2023 **Description:** An overview of the granary at Site 32RI930.	

Photograph: 21 **Orientation:** Facing east **Date:** 11/01/2023 **Description:** A view of the western façade of the granary at Site 32RI930.	

Photograph: 22 **Orientation:** Facing southwest **Date:** 11/01/2023 **Description:** A view of the northern and eastern facades at the granary at the Site 32RI930.	

Photograph: 23 **Orientation:** Facing southeast **Date:** 11/01/2023 **Description:** A view of the western façade of the granary at Site 32RI930.	

Photograph: 24 **Orientation:** Facing east **Date:** 11/01/2023 **Description:** A view of the interior of the granary at Site 32RI930.	

Photograph: 25 **Orientation:** Facing north **Date:** 11/01/2023 **Description:** A view of the interior of the granary at Site 32RI930.	

Photograph: 26 **Orientation:** Facing east **Date:** 11/01/2023 **Description:** A view of the ceiling of the granary at Site 32RI930.	

Photograph: 27 **Orientation:** Facing north **Date:** 11/05/2023 **Description:** An overview of Site 32RI931.	

Photograph: 28 **Orientation:** Facing south **Date:** 11/05/2023 **Description:** An overview of Site 32RI931.	

Photograph: 29

Orientation: N/A

Date: 11/05/2023

Description: Examples of glass artifacts identified at Site 32RI931.

Photograph: 30

Orientation: N/A

Date: 11/05/2023

Description: A view of a Thatcher Glass Manufacturing Company glass bottle identified at Site 32RI931.

Photograph: 31

Orientation: N/A

Date: 11/05/2023

Description: A view of a Ponds cosmetic milk glass jar identified at Site 32RI931.

Photograph: 32

Orientation: N/A

Date: 11/05/2023

Description: A view of a glass insulator identified at Site 32RI931.

Photograph: 33 **Orientation:** N/A **Date:** 11/05/2023 **Description:** A view of bricks identified at Site 32RI931.	

Photograph: 34 **Orientation:** N/A **Date:** 11/05/2023 **Description:** A view of a stoneware fragment identified at Site 32RI931.	

Photograph: 35 **Orientation:** N/A **Date:** 11/05/2023 **Description:** A view of metal scrap identified at Site 32RI931.	

Photograph: 36 **Orientation:** N/A **Date:** 11/05/2023 **Description:** A view of a roof shingle (left) and an OvenServe Ware base (right) identified at Site 32RI931.	

Photograph: 37 **Orientation:** N/A **Date:** 11/05/2023 **Description:** A view of a Shasta soda can from Site 32RI931.	

Photograph: 38 **Orientation:** Facing north **Date:** 11/05/2023 **Description:** An overview of Isolated Find 32RIX409.	

Photograph: 39 **Orientation:** Facing west **Date:** 11/05/2023 **Description:** An overview of Isolated Find 32RIX409.	

Photograph: 40 **Orientation:** N/A **Date:** 03/12/2024 **Description:** A view of a projectile point recovered from Isolated Find 32RIX409.	

Photograph: 41 **Orientation:** N/A **Date:** 05/30/2024 **Description:** A view of the soil profile in a shovel probe excavated at Isolated Find 32RIX409.	

Photograph: 42 **Orientation:** Facing north **Date:** 11/06/2023 **Description:** An overview of Isolated Find 32RIX410.	

Photograph: 43 **Orientation:** Facing west **Date:** 11/06/2023 **Description:** An overview of Isolated Find 32RIX410.	

Photograph: 44 **Orientation:** N/A **Date:** 11/06/2023 **Description:** A view of a flake identified at Isolated Find 32RIX410.	

Photograph: 45 **Orientation:** N/A **Date:** 11/06/2023 **Description:** A view of a flake identified at Isolated Find 32RIX410.	

Photograph: 46 **Orientation:** Facing south **Date:** 11/06/2023 **Description:** An overview of Isolated Find 32RIX411.	

Photograph: 47 **Orientation:** Facing east **Date:** 11/06/2023 **Description:** An overview of Isolated Find 32RIX411.	

Photograph: 48 **Orientation:** N/A **Date:** 03/18/2024 **Description:** A view of a projectile point recovered from Isolated Find 32RIX411.	

APPENDIX D – SHOVEL PROBING RESULTS

Shovel Probing Results at Site 32RIX409

Site	Probe No.	Depth (cm below surface)	Soil Horizon	Description	Shovel Probe Result
32RIX409	1	20	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1	38	B	2.5Y 4/2 Silt Loam	No Cultural Material Recovered
32RIX409	1 – 5W	22	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 5W	35	B	2.5Y 4/2 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 10W	19	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 10W	36	B	2.5Y 4/2 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 5N	21	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 5N	36	B	2.5Y 4/2 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 10N	24	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 10N	36	B	2.5Y 4/2 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 5S	19	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 5S	30	B	2.5Y 4/2 Silty Clay Loam	No Cultural Material Recovered

32RIX409	1 – 5E	20	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 5E	36	B	2.5Y 4/2 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 10S	21	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 10S	35	B	2.5Y 4/2 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 10E	25	A/Bp	10YR 2/1 Silty Clay Loam	No Cultural Material Recovered
32RIX409	1 – 10E	37	B	2.5Y 4/2 Silty Clay Loam	No Cultural Material Recovered

APPENDIX E – UNANTICIPATED DISCOVERIES PLAN

[Intentionally Omitted – Provided Separately]